

# THE MICHIGAN FARMER

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### NOTES BY THE WAY.

St. Clair County--A Visit to Some of its Shorthorn Herds--A County that is Making Rapid Progress in Stock Breeding.

A visit to that portion of St. Clair County which lies along the beautiful river of that name at this season of the year is a most enjoyable one, and certainly the editor of the FARMER will long remember the one paid a few days ago, in company with Mr. Geo. W. Phillips, the veteran Shorthorn breeder of Macomb County. Meeting him at Ridgeport, on the Grand Trunk railroad, we started for the town of St. Clair, on the branch line of the Canada Southern. Whoever has not seen St. Clair in the month of June or early in July has yet something to look forward to. It is so beautifully located, its streets well shaded with magnificent trees, its main street, running parallel with the river, affords the visitor such beautiful views, that it should be visited by every one who has not yet realized how very beautiful some of our Michigan towns are. At the station the genial face of Mr. Charles F. Moore was seen in the crowd, and Mr. and Mrs. Phillips and the FARMER representative were soon speeding toward his farm and residence.

This farm is only a few blocks from the main street of St. Clair, and next to the breeding stables of Mr. Mark Hopkins. It is a nicely rolling, soil of all varieties, from a strong clay to a sandy loam, and even some sandy ridges. It consists of about 180 acres, lying on both sides of the road, and is well adapted to stock-raising. Mr. Moore is well known to stock-raising. He has a large and another magnificent barn to his already large farm buildings, a proceeding rendered necessary by the rapid increase of his herd of Shorthorns. The stables are arranged for the cattle will meet the approval of practical men. They are roomy, well lighted and ventilated, and the arrangements for feeding and caring for the stock excellent. The windows for lighting are provided with blinds, which allows them to be darkened while the flies are bad without interfering with the ventilation. In the stables we found the calves and the bulls which are turned out after the air cools off in the afternoon. The cows and heifers were all in the pastures, and were looking in prime condition for breeding stock. The herd at present consists of 34 head of females, divided up as follows: Kirklevingtons, 3; Barringtons, 1; Teas, 15; Victorias, 3; Oxford Vanquishes, 2. Besides these are the bull Kirklevingtons of Erie 44183, and three Kirklevingtons, which are owned in company with Mr. John P. Sanborn, of Port Huron. Mr. Moore has also the young bulls 4th and 5th Teas Rose Dukes, and a red bull calf out of the Oxford Vanquish cow purchased at the McPherson sale. The Barrington cow, Countess of Barrington 10th, is the one purchased at the Attila sale at Dexter Park last fall, and she is looking fine. She is in calf to Mr. Attila's bull Grand Duke of Ridgewood 69905. This cow was bred by the Duke of Devonshire and imported by Mr. Attila. She was sired by Duke of Gloster 7th (99735), her dam being Countess of Barrington 8th by Duke of Tremont 2d (36022). This cow is a prize to any breeder, and should lay the foundation of a family of Barringtons in this herd which will be second to none in breeding.

The Kirklevington, a family to which Mr. Moore is very partial, is represented by three head, namely, Kirklevington Duchess 15th, by imp. Kirklevington Duke (41768), out of imp. Kirklevington Duchess 5th, by 3d Duke of Bowley (28441); Kirklevington Duchess 17th by Duke of Hillsdale 43420, out of Kirklevington Duchess 8th by Kirklevington Duke (41768); and Kirklevington Duchess 10th, also by Duke of Hillsdale 43420, out of imp. Kirklevington Duchess 10th by imp.

Kirklevington Duke (41768). These three heifers were all calved in 1884, all red in color, and their breeding certainly is as fine as could be wished for.

The Teas Rose family comprises 15 head, and they have done well on this farm. Take them as a whole and it would be difficult to find the same number of one family in any one's herd which will out-show them, or do better as regular breeders and good milkers. The bull calves raised from them are at the head of three or four herds in the State, and we know they have given the greatest satisfaction. Mr. Phillips took to this family at once, and in fact visitors to this farm cannot but be favorably impressed with their general appearance, and the evidence they show of individual merit.

The Victorias, three in number, are of very fine breeding, tracing through six high bred Bates bulls to the imp. cow Victoria 28th by Brokenhorn (13500), thence to the cow No. 1 of Mason's sale by Cato 119, and thence to that grand old cow Lady Maynard. These females are all young and in good shape.

The Oxford Vanquish cow and heifer calf purchased at the McPherson sale have improved greatly, and the cow now has a red bull calf by her side.

As for the young calves, there are some very choice ones, all sired by Lord Kirklevington of Erie 44183, the bull owned in company with Mr. Sanborn, whose breeding we have frequently referred to in the FARMER. One of the calves by him and from the original Teas Rose cow in the herd, a large broad backed cow, yellowish red and white, has been shown and is being fed by Mr. Moore to show what a high bred Shorthorn will do as a meat producer. This calf is a beauty, red and white in color, now seven months old, and looks like a yearling. Up to six months old he made an average gain of 84-100 lbs. per day.

Here we saw a very nice red heifer owned by Judge Eldridge, of Mt. Clemens, bred by Mr. Geo. W. Phillips, sired by Rufus 18275 and out of Phoenix 10th.

While here Mr. John P. Sanborn, with Mr. F. Westall, of Port Huron, drove down and invited the party to go up to Port Huron the next day and see his herd of Shorthorns, an invitation which was accepted.

Mr. Moore has been largely interested in breeding horses, and has a number of brood mares, young stallions, fillies and colts on the farm. He has decided to close them all out, as he finds he has not room on his farm for them and as many Shorthorns as he proposes keeping as a breeding herd. The brood mares were carefully selected, and include some choice animals, mostly Canadian bred Clydes, with a few roadsters. A horse breeder can secure some bargains here.

Next morning the party started for Port Huron on the steamer, and had a pleasant sail on the St. Clair. Mr. Moore and Mr. James Sanborn also came along. After lunch at Mr. John Sanborn's the party were driven out to the stock farm of the latter. Here the Shorthorn has had an abiding place for the past fourteen years. In connection with Messrs. Avery & Murphy, Mr. Sanborn made Port Huron known all over the country as the home of two noted Shorthorn herds. The influence of these herds has been felt all over Michigan, and there are very few herds in the State to-day which do not contain more or less of their blood. In fact the establishment of those herds at Port Huron marked an era in the history of Shorthorn breeding in the State, and while the proprietors undoubtedly sacrificed a large amount of money, there is no saying how great a benefit the State derived from their becoming interested in breeding Shorthorns.

The Sanborn herd is largely made up of one family, that of the Victoria, or Victoria Duchesses as they are known by many. The foundation was the cow No. 1 of the Mason sale, running back to Lady Maynard. This family is held in highest esteem in England, and in this country the cows have been topped by the highest bred Bates bulls, Dukes and Oxfords, which could be procured. A number of the older cows were sired by 3rd Duke of Aldrie 19393, others by 3rd Grand Duke of Aldrie 32760, a son of the 3rd Duke, and out of Victoria Duchess 8th by 4th Lord Oxford 3903, and the younger ones by Lord Kirklevington of Erie 44183. Then there are the three Kirklevington cows owned in company with Mr. Moore, Kirklevington Lady 5th, 6th and 7th, the first sired by 3rd Grand Duke of Aldrie 32760, and the other two by Lord Kirklevington of Erie 44183, besides some half a dozen of the Magenta family.

As the herd comprises so many animals tracing to one line of blood, it was to be expected that it would show considerable uniformity, and in this respect the visitor will not be disappointed. There are six Victoria bulls, in age running from three years to less than a year, four sired by Lord Kirklevington of Erie 44183, and the two oldest by 3rd Grand Duke of Aldrie 32760. Either of these bulls is good enough to go to the head of any herd individually, and as for their breeding it shows for itself. There are three other young bulls bred from the Magenta family which are also good ones. The herdman drove into the yard from the pastures 14 yearling and two-year-old heifers, and we can say that a handsomer lot we never saw in one man's herd. Two two-year-olds, from their fine proportions and grand style, were selected as perhaps the choice of the lot. One of these is Victoria Duchess 28th red and white, with a little white, two years old in March, sired by Lord Kirklevington of Erie 44183, dam Victoria Duchess 7th, by 3rd

Duke of Aldrie 19393. In rib, back, loin and quarters she is nearly perfect. Through the crops she is especially good. The other, Victoria Duchess 28th, is a red roan, two years old in February last, by Grand Duke of Connaught 46202, now at the head of the Rumsey herd, dam Victoria Duchess 18th, by 23d Duke of Aldrie 19393; g. dam, Victoria Duchess 8th, by 23d Duke of Aldrie 19393. The party was nearly divided as to which of these two heifers was the best. We favored the roan, as we thought she was slightly the best in the back and loin; in no other point, however, could we see the slightest difference in favor of one over the other. Two other choice ones were Victoria Duchess 29th and Victoria Duchess 31st, neither of them yet two years old. The younger ones, generally a little over a year old, were very neat animals, one, a half sister to the roan two-year-old, just mentioned, is remarkably good. Her sire was Lord Kirklevington of Erie 44183, and both dam and grand dam were by 3rd Duke of Aldrie 19393.

There are some grand cows in this herd, and with the breeding such as it is, the class of bulls they are being bred to, the young things are deserving of the attention of Michigan breeders. We have no hesitation in saying that breeders who visit this herd will be as much surprised as we were at its members, condition and individual merit. We did not see a poor animal in the lot, which certainly speaks well for the herdman who has them in charge.

At the farm we met with Mr. George Torrison connected with the celebrated herd of Mr. A. Cruikshank, of Sittiton, Scotland, and now running a dairy farm in the vicinity. He is a great admirer of the Shorthorn, and evidently a judge of what a good one should be.

There are several other matters in connection with this farm we should like to refer to, but space forbids us saying anything more this week.

### HYBRIDIZING WHEAT.

To the Editor of the Michigan Farmer.

I wish to ask you a few questions with regard to wheat. Some of our farmers are buying seed wheat, paying \$25 for three bushels, called the New Mediterranean Hybrid. The wheat to look at would indicate a mixed wheat of Mediterranean and New Zealand origin. I wish to ask you how wheat is crossed, if crossed at all, and if the wheat will, by sowing, reproduce the cross? Or does it show mixed wheat? The parties selling have a piece of this wheat near Saline. They claim the cross is produced with an instrument, using pollen of the other kind on the male wheat. Does wheat grow separate stalks or heads, male and female, and how is the male wheat distinguished from the female? I find our agriculturists say much more about strawberries than wheat.

B. NORTH.

SOMERSET CENTER, July 2, 1886.

All of our kinds of wheat belong to one species, and therefore cannot be hybrids one with another. They may be cross-bred. This is done by carefully removing the stamens, or male element, before any of the pollen has been scattered or matured. In place of this the chaff is carefully spread, and pollen from another sort is applied. An expert may fix one spike in half an hour or so. It is delicate work and can not well be done except by a botanist, or one who has been shown the operation. Wheat in the field does not often mix with wheat near by, as does one lot of Indian corn with another. Wheat is close fertilized, each kernel being fertilized by pollen in the same chaff. After cross fertilization it will take about five years of selection of certain types before each will become fixed so it will come true to sort. In other words, after crossing two sorts the progeny will breed up into many sorts.

Each flower of wheat contains both the male and the female elements.

The breeding and selection of better sorts of wheat deserves vastly more attention than it has ever received. Judging from the above letter, I should question whether the "new" wheat is worth the price asked.

W. J. BEAL.

Professor of Botany, Agricultural College.

### Another Wheat Pest.

Two correspondents of the Country Gentleman, writing from different States, report the discovery of a worm that is doing great damage in the wheat fields. One of the correspondents describes the pest as being about an inch long, greenish in color, with a brown head, the body tapering from head backwards, no tail and ten pairs of feet. The worms, the correspondent states, do not attack the blade or the head, but crawl up the stalk, strip off the head, and feed upon the headless stalk, apparently enjoying the soft green straw. The loss, as estimated by one of the correspondents, is fully ten per cent.

Prof. Lintner, entomologist, of New York State, is of opinion that the specimens sent him indicate that the wheat fields are to be subjected to a new pest, as nothing like it has come under his observation in the past. He is inclined to believe that it is related to the saw-fly, species of which have committed serious depredations on small fruits. Prof. Lintner closely observed the habit of the worms and found that they had three pairs of long legs and eight pairs of conspicuous prolegs. The head is large, round and flattened, white in front, black on the sides and brown above. The entire length of the worm was an inch and a tenth, and the color of its body closely resembled that of a stalk of grass, which the worms were fed upon. If disturbed, they draw the heads inward, elevate the terminal ends or emit a liquid after the manner of many of the saw-fly larvae.

### NOTES FROM SOUTH HAVEN.

The meeting of the West Michigan fruit-growers at South Haven recently, furnished the opportunity of meeting many of the noted fruit men of the east shore of Lake Michigan, and of looking over some of the many fine fruit farms in that vicinity. This port is the southernmost point from which peaches are now shipped in any quantity, and that they now have trees exempt from the yellows, is due to the fact that they fought the disease with axe and fire from the first. The Enton Harbor district, where the peach industry was swept out of existence in a few years by the disease, by the let-alone fallacy, was an example and a warning which led the fruit-growers of South Haven to exert themselves to beat back so malignant a foe. At the weekly meetings of their local Horticultural Society, the matter was persistently presented, and a co-operative action secured, which has proved the wisdom of the course. It took a good deal of nerve to sacrifice a tree loaded with fruit when perhaps only half a dozen specimens on one side showed the premonitory symptoms of the yellows. One grower cut 70 trees one year at the first onset of the disease, but by a vigorous watchfulness, two or three trees per acre is now the usual average. By the report of the yellows commissioner in 1881, only 7 1/2 per cent of the whole number of trees were destroyed under the law, and it would probably not now exceed two per cent. There have been various remedies tried. One grower has been experimenting with copperas, and has this year sown a ton and a half on ten acres of trees. He is also using tanners' salt, in which much of the fleshing of the hides is mixed. He has a very healthy orchard--the trees loaded with fruit. This first experiment with copperas was made by boring into a tree, filling the hole with copperas and plugging it up, then examining the limbs to determine whether it entered into the circulation or not. There was a gradual ascent of the solution, known by the coloring of the inner bark of the limbs. Upon this hasty hypothesis the sulphate was sown. It is not certain that the roots when left to their choice will take up so acid a solution from the soil, and further experiment is necessary before the idea will be generally accepted. The plan almost universally adopted is to sow winter rye at the last cultivation in summer--the growth before winter is a protection from winds, would otherwise drift the soil away from exposed places. It also holds the falling leaves and thus blankets the earth for protection in winter. The rye is turned under in May before it gets its growth. If left later it does not rot and serves to dry out the soil. Not so much dependence is placed upon the added fertility to the soil by plowing it in, as upon the incidental benefit which its growth yields.

The plowing in spring is between the rows the same way every year, but toward the trees, and away from them in alternate seasons. Some growers on heavy soil ridge up the rows permanently to facilitate drainage, and to keep the feeding roots above water. The strip of land bordering the lake, within a mile from the shore, is the favorable limit here for peaches, due entirely to the contour of the land. Back from this the surface widens the other way, and frosts and 20 deg. below zero reign over all, as well as in inland places.

Further north, at Douglas and Fenville, the peach belt line deflects further from the shore and increases the width where the annual selection with peaches seems sure. State Senator C. J. Monroe has a fine residence and farm of over 200 acres two miles southeast from the town. Although within the charmed peach circle, his soil seems ill adapted to the wants of the trees, and they fail before maturity. He is tilling his land, and hopes yet to succeed in raising peaches. Mr. Monroe thinks it needs men with means and muscle, and both well topped off with brains, to succeed in fruit growing. From the observatory at the top of his house, some of the noted fruit farms can be seen, and a beautiful view of the lake and the shore line is obtained. The milk supply for the town comes from this farm. The stables are patterns of convenience and neatness. The milking floors are provided with blinds, to be closed when the cows are to be milked; here in partial darkness and silence, the dancing of the milk streams into the pails is all that can be heard. His men are domiciled in cottages on the grounds, where they live the year round. The buildings make quite a suburban appearance, and reflect great credit upon the taste and managing ability of the owner.

T. A. Bixby is one of the solid fruit growers, living two miles north of the town. He carries on quite extensive farming operations in connection with peach growing. He is the Shropshire sheep man of that whole region, and has a flock of over 30 pure bred sheep. He has several imported animals. This year's crop of lambs are perfect specimens of the breed, and he shows with a good deal of pride, his yearling flock. The pedigrees are all straight, for he had some of them framed, and the chronology was in a clear John Hancock style. Any one visiting South Haven this fall in quest of big sheep and large peaches, I can commend them to my friend Bixby for satisfaction. Across the road from Mr. Bixby lives another big-hearted fruit grower--Mr. Sheffer. From the observatory of his house can be seen a solid section of fruit trees and plantations. It is believed

that the yearly average production per acre from this section of land is greater than from any other single section of arable land in the State, and they offer to prove it by their bank accounts.

A. C. Merritt, a little north of this, has the model acre of Niagara grape vines. They are trellised to four wires on horizontal bars; they are set eight feet each way, and there is not a break anywhere. The rows are uniform in density from end to end, and from side to side. It is a model acre, and I challenge the State to produce anything finer. Near here Mr. Griffin leads one gradually up to his climax--300 peach trees four years old. The person who don't go into ecstasies over these trees well merits his utter disgust. The first tree is a round topped model and every other tree is its equal. The ground under the trees is as clean and smooth as a machine swept pavement. The trunk of the second tree is about three and a half feet, and the branches of every other tree spring from the same height. Every person among these intelligent fruit growers seems to have something "way up" above the average and the visitors is sized up according to the degree of appreciation which he evinces for the climaxes which they spring upon him. They delight in seeing the eyes of a novice bulge. Even the Governor put his foot in it that day, by asking for what crop they were preparing the ground under the trees so nicely. It is safer for persons from "way back" to listen, rather than to advance theories. They come down hard upon impractical theories.

As an evidence of the solid value of the industry here, I learn from Hon. C. J. Monroe, the president of the bank, that in 1881, the last full bearing year, they paid through the bank for fruit \$135,012.99. Estimated amount paid to shippers in Chicago, and received in currency for sale to local speculators \$30,000, making \$155,012.99 realized for fruit that year. There had been paid out for the bank for strawberries to June 25th, \$10,000. The estimate from date at hand is that this year's crop of peaches will yield 300,000 baskets to be shipped at South Haven, and the small fruits will be increased one-third. I have statements kindly furnished me by several of the growers showing the profit of peach growing, but which I have concluded not to publish. I staid over night in an elegant house that was built with the proceeds of one crop of peaches. It is a solid building, and the proceeds at a yearly average of \$300 per acre in orchards over six years old. This presupposes that the cultivation, thinning &c., is up to the standard of excellence prevailing here, and that the location is favorable. The business is very exacting upon the time of the grower. There is not much of that Eden-like sitting under the vines or fruit trees, and one can't very well catch cucumbers with gloves on. But that these fruit growers live well, dress well, and drive well, I can testify, and if one wishes to see how fruitgrowing is managed at its best, I commend him to the fraternity at South Haven.

### SELECTION OF STOCK RAMS.

BY WM. H. BLOW, THORNTONVILLE, LAPEER CO., MICH.

(Paper read at the annual meeting of the Lapeer County Sheep-Breeders' and Wool-Growers' Club.)

Mr. President and Fellow Sheep Breeders of the Lapeer County Sheep-Breeders and Wool-Growers' Club: The selection, breeding and management of sheep has been so ably written up and discussed for the last few years, that it seems almost useless for me to attempt to give you anything entertaining or instructive in relation to so important a subject as the selection of stock rams. It is one of the most important points in breeding sheep. It is considered by many good writers and stock breeders that the ram is entitled to the credit of being one half of the flock, and I think so myself. Then how necessary it is for us to make proper selections of stock rams for our flocks. I would not have you think that I know all about the proper selection of stock rams, but from the experience and close observation of the last twenty-five years, in the selection and breeding of fine wool sheep, I will try, in my bungling way, to give you my opinion of the proper selection of stock rams; and I want to say right here that what I may say or the description I may give, are only my own views in relation to this subject; do not therefore, take them for any more than you think they are worth.

In the first place, we will suppose we have a flock of ewes about an average of the neighborhood. Look them over carefully and see what style of ram is the most suitable for them. If you should find them somewhat plain, long in the legs, thin and somewhat dry in fleece, then a wrinkle ram with rather medium length of legs, medium length of staple, with a heavy, oily, and very dense fleece should be selected. We should be governed according to the style of the ewes in the selection of the ram. A very plain flock of ewes should have a very wrinkle ram, and a more stylish and wrinkle flock of ewes should have a less wrinkle ram. I am very well aware that many good breeders eschew wrinkle sheep, especially the ram, but which of the two, the plain or the wrinkle grower--Mr. Sheffer. From the observatory of his house can be seen a solid section of fruit trees and plantations. It is believed

the neck, and give a more stylish and a thicker fleeced offspring, carrying more cleaned wool than plain rams.

During the last twenty years much has been said and written in condemnation of wrinkle, oily sheep, and many people have adopted the views and opinions of the late Henry S. Randall, of New York, who often denounced them in his writings in unqualified terms; yet we have reason to know that after a long life of experience and observation, his opinions on the point underwent a radical change. One of the last crosses selected by him was Martin's Torrent, one of the most wrinkle rams ever seen. He afterwards selected two other rams of like type, which were retained in his flock until his death. What does the shearing record disclose? That some of the heaviest fleeced rams were wrinkle sheep. Such rams as Torrent, Keystone, Triumph, L. P. Clark, Smuggler, Greasy Bill, Diamond, Acme, Eureka and Result were very wrinkle rams. Had I time I could mention very many more of those very wrinkle rams. In what did the excellence of the get of those rams of history consist? In their good bone, strong constitution, uniform length, covering and great density of fleece; and last, but not least, the record shows that wrinkle rams have produced the heaviest cleaned fleeces on record. Perhaps some of you would like to know how I account for the quality of such plain rams as the renowned Addison, Genesee, Hopeful, Bob Lusk, and others I could mention. The sire of Addison was Eureka, a very wrinkle ram, dam by Sweepstakes. Hopeful and Bob Lusk were bred somewhat in the same line, and their immediate ancestors run right back to wrinkle stock. Genesee, by Addison, dam by Old Genesee, second dam by Little Wrinkle, whose immediate ancestors run back to wrinkle stock. So you see that it was within the laws of breeding for them to transmit good qualities to their offspring.

In selecting a stock ram, in the first place form in your mind just such a flock of sheep as suits your fancy, and breed up as near to your standard as possible. Visit the stud flocks in your vicinity, look them over carefully, find out their breeding, and select your ram from the flock that comes the closest to your standard. Be sure that he is a thoroughbred and recorded, and the cleanest in-and-in, or type or line-bred, the better. It has been shown by some of the best of our writers and breeders that time or type-bred animals have given the best results, especially when crossed out on new blood, with most of our domestic animals. Some of the finest flocks of sheep that I am acquainted with, both thoroughbred and grade, are line or type-bred. One of the finest flocks of grade fine-wool sheep that I am acquainted with was bred from rams drawn from one flock, without a single outcross for over twenty-five years. The ram should possess good form and size, not, as many seem to think, as large as a yearling steer, and a Shorthorn at that, but of good medium size, weighing from one hundred and twenty-five to one hundred and fifty pounds in fair flesh. I consider the form a very important point in the selection of our stock rams, as it is a very well known fact that like will produce like, transmitting defects equally as well as good heredity. He should have a good strong head, wide between the eyes, short face, a broad and open nostril, clear bright eyes, the forehead well covered with wool coming a little below the eyes, with thick soft velvety ears, free from tan marks, and the clover covered up with wool the better. He should have strong heavy horns; they should stand about two inches from the head at the twist to give room for shearing about them; they should be evenly turned, broad on top and wide up and down, showing good constitution. The head should stand well up, giving good length from chin down to the forward legs, and short on top of the neck, with heavy neck folds, commencing small on top and increasing in size to the bottom of the folds; not too many folds, but they should be even, and the larger the better, especially as they near the shoulder. He should have medium length of legs, and stand square on them and quite wide apart, especially the forward ones, giving a deep and broad, heavy shoulder, sound and very thick through the heart, to give good action of the lungs, and showing a good constitution; short, broad back, especially across the loin; the flank well let down to give a level appearance on the underside; the hips broad and well carried out at the tail; well filled in between the hind legs. Now comes the wrinkles. I would prefer the medium form; of wrinkles, commencing about two-thirds of the way up on the side of the body, and running down and across the belly, not too many of them. They should commence small at the top and increase in size as they run down, and larger the better on the bottom or underside, with a large wrinkle running across the shoulder at the elbow, and heavy wrinkles over the hips and about the tail. The fleece is another very important point in the selection of stock rams; it should be very dense all over the body, and especially so about the weak places over the hips, and between the neck folds and belly. See that the length holds out in these places; also the length of staple should be from two to two and one half inches in length; the fleece should be as even in texture all over the body as possible; it should be well crimped or serrated throughout the

entire fleece, and from the inner to the outer ends of the staple; the fleece should open when pressed apart like the leaves of a book, and show a thin pink colored skin. In respect to yolk or oil we should be governed somewhat by our breeding ewes. A very oily flock of ewes does not require so oily fleeced a ram as a less oily flock of ewes, although there is not much danger in this respect for our ordinary grade flocks, especially if the oil is properly distributed throughout the fleece; it should cover every fiber of the fleece, from the inner to the outer ends of the wool. The color of the oil is another important point with me. It should have a bright golden tinge, or a creamy color all through. Very many good breeders prefer the white color, but nothing looks as rich to me as the golden fleece.

### CATTLE BREEDING.

Mr. Wm. Housman, the well known English writer upon cattle, gives the following valuable suggestions to breeders in a recent issue of *Bell's Messenger*:

"Private letters repeatedly come asking for advice on the fitness of certain proposed couplings, the degrees of relationship within which it is safe to breed, and the probable results of specified 'mixtures of blood.' To answer all these questions privately and separately would be a difficult task, especially as in some cases the animals mentioned have not been seen by the present writer, and without seeing an animal and knowing its character and constitution it is impossible to give an opinion of the smallest value as to whether a certain 'cross,' that is understood to mean a certain coupling, or what 'cross' (coupling) is likely to prove suitable. Two animals may be very closely related in blood, and may be already inbred, and yet may breed healthy, vigorous, prolific offspring, in no way inferior to the animals themselves or their ancestors. But the unguarded inbreeding is dangerous practice, it is scarcely necessary to say again here, it has been said before so often, in the *Messenger* and elsewhere. One writer, let us suppose, has a grand cow, whose blood is compounded of so many thirty-second parts of this and so many of that, one-sixty-fourth of something else and one sixty-fourth of another. He wants to know whether a mate owning seven-eighths of this and one-eighth of that will do, as he wishes to breed up to 'pure this.' Truly, questions of this kind are but the drags of a system now happily past. Let not this be misunderstood. Analysis of pedigree, first brought prominently and frequently before Short-horn breeders in the columns of the *Messenger*, was designed to counteract the false-old, one-sided notions, which failed to recognize a large, and the vastly largest part of an animal's ancestry; and it was designed to lead the mind of the inquirer up all the lines of primogenitors, male and female, instead of leaving it in ignorant contemplation of one line alone. But no sooner had the true principle received general acceptance than hundreds of minds turned it to a false use, supposing that as they might demonstrate the exact proportion of each current of blood in an animal's veins, they might equally well ascertain the precise properties of each current, predict with certainty the effects of each mixture, and do their breeding by recipe. This absurd supposition, apparently based upon mental confusion of the whole distinct ideas of a chemical element and a strain, so-called, of blood, may be dismissed. Until it is dismissed, no advice possible here is likely to have much effect. If a reader entertain it, he cannot be in any way in sympathy with the writer, nor prepared to understand the principles of breeding recognized by him.

"Another reader states his case. His cattle are apparently sound in constitution, but closely related. Now it is just in such cases as these that pedigree may greatly assist the inquirer. Let him not depend upon the rude health in his cattle, nor the want of evidence of disease inherited, but carefully search back through all the lines that meet in the two animals which he would pair, and in doing so remember such records as have been given of the deaths of ancestors, the causes of those deaths, *post mortem* revelations, and so forth. If he can find a clean bill of health all through, the risk of pairing near relations may not be greater than a cautious man would incur for the sake of uniting two animals of great merit, in the reasonable hope of perpetuating that merit; but if he should find traces of constitutional disease, especially if it be one and the same disease on both sides, let him beware of the temptation to unite. Latent disease has been brought out again in its original power, and with most disastrous results, by incautious unions of animals descended either from one common progenitor in whom the disease was developed, or from different progenitors, each afflicted with the same disease. The mere fact of blood-relationship, possibly, does not go for much. It is the double inheritance of disease that makes the danger. Still greater is the danger when the inheritance is multiplied. As some hereditary diseases of cattle are understood to be communicable to mankind, the breeder's responsibility in knowingly perpetuating such diseases is no light matter."

The annual picnic of the farmers of Washtenaw, Wayne, Oakland and Livingston Counties, will be held at Whitmore Lake on Saturday August 31, 1886.



## The Horse.

### Dates Claimed for Trotting Meetings.

Detroit, Mich.	July 20 to 28
Cleveland, O.	July 27 to 30
LaSalle, Ill.	July 27 to 30
Ottawa, Ill.	Aug. 8 to 10
Carthage, O.	Aug. 8 to 10
Jamestown, O.	Aug. 8 to 10
Hillsboro, O.	Aug. 8 to 10
Joliet, Ill.	Aug. 10 to 13
Rochester, N. Y.	Aug. 13 to 15
Utica, N. Y.	Aug. 17 to 20
Chicago, Ill.	Aug. 17 to 20
Streator, Ill.	Aug. 17 to 20
Easton, Ill.	Aug. 23 to 27
Farmington, N. Y.	Aug. 24 to 27
Covington, Ky.	Aug. 24 to 27
Waterloo, N. Y.	Aug. 24 to 27
Springfield, O.	Aug. 24 to 27
Columbus, O.	Aug. 24 to 27
Rockford, Ill.	Aug. 24 to 27
Pittsburg, Pa.	Sept. 3 to 6
Des Moines, Ia.	Sept. 3 to 6
Chicago, Ill.	Sept. 3 to 6
Toledo, O.	Sept. 6 to 10
Omaha, Neb.	Sept. 6 to 10
Kalamazoo, Mich.	Sept. 7 to 9
Belvidere, Ill.	Sept. 13 to 17
Kalamazoo, Mich.	Sept. 13 to 17
Fort Wayne, Ind.	Sept. 13 to 17
Detroit, Mich.	Sept. 13 to 17
Kansas City, Mo.	Sept. 13 to 17
Woodstock, Ill.	Sept. 14 to 17
Poughkeepsie, N. Y.	Sept. 14 to 17
Cleveland, O.	Sept. 14 to 17
Myrtle Park, N. Y.	Sept. 14 to 17
Washington, Pa.	Sept. 20 to 24
Grand Rapids, Mich.	Sept. 20 to 24
South Bend, Ind.	Sept. 20 to 24
Reading, Pa.	Sept. 20 to 24
Lebanon, O.	Sept. 21 to 24
Libertyville, Ill.	Sept. 21 to 24
Oregon, Ill.	Sept. 21 to 24
Lexington, Ky.	Sept. 27 to 30
Dayton, O.	Sept. 27 to 30
Indianapolis, Ind.	Sept. 27 to 30
Waukegan, Ill.	Sept. 27 to 30
St. Louis, Mo.	Oct. 4 to 9
Columbus, O.	Oct. 4 to 9
Greenfield, O.	Oct. 13 to 15
Cincinnati, O.	Sept. 28 to Oct. 1
Bloomington, Pa.	Oct. 13 to 16

### A ROYALLY BRED YOUNGSTER.

The two year old colt recently registered as Nuttingham 4993, is a good illustration of the progress that is being made in the evolution that is to result in the perfect trotting horse.

This young stallion is the first and only one that has yet been bred, whose sire and dam each have a record better than 2:30, and if there is anything in the maxim "Bred to the winners," he ought to be a great one, both as a performer and as a stock horse.

Nutwood, his sire, has a record of 2:18½, has 36 heats in 2:30 or better to his credit, and at the close of the season of 1885, when he was fifteen years old, had got eight trotters and one pacer who had entered the 2:30 list, one of them, Felix, having a record of 2:19½, and another one, Nutbreaker, leaving a yearling record of 2:42½, a two year old record of 2:29, and promising the present season to lower the best three year old record of 2:19½, now held by Hinda Rose and Patron.

In conformation and disposition Nutwood is simply perfect, and it can truthfully be said that at the present time he is the most popular stallion in Kentucky, deservedly receiving the approval of the most intelligent breeders and horsemen in the country. The combination of Hambletonian, Mambrino Chief, and Pilot Jr. blood in his veins and in connection with other approved seems to be the par excellence of breeding, strains to make the road to success very plain.

Adelaide, the dam of Nuttingham, was one of the best trotting mares that ever came to the score. She commenced her career in 1874, getting a record of 2:31½, which she reduced in 1875 to 2:22½, in 1876 to 2:21½, and in 1878 to 2:19½. She has 67 recorded heats in 2:30 or better, and many of her races were won from faster horses by reason of her ability to outlast them. She was sired by Phil Sheridan 2:26½, he by Young Columbus 2:35½, and he by Old Columbus, a Canadian pacer that was also a fast trotter and founded the Columbus family. Phil Sheridan was also the sire of the great mare Phyllis, with a record of 2:15½, and 113 heats in 2:30 or better to her credit. Phil Sheridan now has ten performers in the 2:30 class, and with two such mares as Adelaide and Phyllis among them, his right to honor and fame is well established. Young Columbus has eleven such performers, and four sons who have produced one or more, and his daughters have produced eight, among them Abbottsford 2:19½. When it is remembered that Young Columbus and Phil Sheridan stood in Northern New York and did not have the benefit of first class mares, one cannot avoid the conclusion that they were horses of the very highest merit. You might expect the family to be wanting in game and staying qualities, but Adelaide and Phyllis, and others of the family, furnish conclusive evidence to the contrary.

Is it not more than probable that Old Columbus, and Pacing Pilot, the sire of Pilot Jr., were of the same origin, and should not the ancestry of these Montreal or St. Lawrence river pacers be more fully investigated?

Nuttingham is a beautiful chestnut in color, without suggestion of the sorrel, and it is doubtful whether the most critical judge could find a weak spot in his conformation. With rare intelligence and pure trotting action he gives promise of a great future.

*Wallace's Monthly.*  
Nuttingham, the colt above referred to is owned by Capt. William Willets, of Pontiac, Mich., and it is expected that he will make the season of 1887 in that city. Nutwood, the sire of this colt, stands for \$250, and was got by Belmont, (a noted son of Alexander's Abdallah), and his dam was Miss Russell, the daughter of Pilot Jr., distinguished for being the dam of Maud S. 2:08½.

### THE CHICAGO MEETING.

The racing at Washington Park, Chicago, which opened July 3d, was of a high order. The horses comprised a number of the best now on the turf, and the events were generally of great interest. The American Derby had ten starters, namely, Ben Ali, Preciosa, Blue Wing, The Bourbon, Sir Joseph, Silver Cloud, Lijero, Ed. Corrigan, The Duke, and Lewis Clark. Ben Ali was the favorite, his victory in the Kentucky Derby giving him the call, while Blue Wing was fancied by a strong party. The result was a great surprise, Silver Cloud winning by three lengths after a sharp contest, Blue Wing second, and Ben Ali in the mob. The race, a mile and a half, was run in 2:37½, the first mile in 1:45. Silver Cloud was bred in California, sired by Grinstead, Jam Experiment, by Monarchist, and is owned by E. J. Baldwin, of California. On

the second day Jim Douglass, by Wildside, won a mile and a sixteenth dash in 1:47½, beating all previous records by a second and a quarter. On the 6th, in a mile and a half race, Baldwin's Volante, by Grinstead, dam Sister Anne, won in the excellent time of 2:36½, the first mile being run in 1:42½. The winner carried 118 lbs., the top weight, and won easily. The Sheridan stakes was another surprise. Silver Cloud, after winning the Derby, was a strong favorite. The starters were Ed. Corrigan, Jim Gray, Silver Cloud, Kaloolah and Pure Rye. Ed. Corrigan was virtually without backers, but he won an exciting race in good time. The race was a mile and a quarter, and was run in 2:10, the first mile in 1:43. Silver Cloud never had a chance of winning, and finished third. Corrigan is by Joe Hooker, dam Countess Zeka, and is owned by R. P. Ashe. The other races were also sharply contested, and as the attendance was large and the course in good condition, the meeting has been a decided success.

### Horse Gossip.

**JEROME TURNER** is not doing as well as expected this season, and has disappointed those who backed him.

**"LUCKY"** Baldwin expresses a desire to match Volante at a mile and a half against any horse in the country, for \$25,000 a side.

**TRUBADOUR**, the great four-year-old, beat that great mare Miss Woodford, last week, in a mile and a quarter race. The time was 2:08½.

**JOHNSTON**, the pacer, had a matched race with Mike Wilkes on July 5th, at Minneapolis, Minn., for six thousand dollars, and won as he pleased. Time, 2:15½, 2:18½, 2:21.

**MAGNA CHARTA'S** mares are regarded as about the correct type to breed to Hambletonian stallions in Branch County, and they are in request at good prices for that purpose.

**THE** fastest running mile made this season so far was by the three-year-old Adm D., who last week ran a mile in 1:41½, carrying one pound overweight. She is a daughter of Enquirer and Mariposa.

**THE** London Sporting Life, in giving its opinion of race-horses, says the best stayer was Priam, the best miler Mr. Middleton, and possibly the best mares ever seen were Queen of Trumps, Beeswing and Crucifix.

**TREMENT**, the great son of Virgil, is undoubtedly the greatest two-year-old of the year. He has won ten races without a skip, and carried off \$23,110 in stakes. He is owned by the Dwyer Brothers, of Brooklyn, N. Y.

**THE** preparations for the summer meeting of the Detroit Driving Club give promise of a successful meeting. The meeting opens July 20, and closes July 23. The list of entries comprise some of the finest trotters in the country.

**THE** trotting mare Blue Belle, 2:26½, has been sold for \$5,000 to Wm. Moesinger, of Frankfort, German, and is by this time on her way to join the large colony of American trotters in Europe, there being now about 15 animals, with records ranging from 2:17½ to 2:30, on the other side of the water.

**THE** Pontiac Gazette is authority for the statement that Mr. H. Skidmore has in the fair ground stable at that place, a trotting horse that is said to be the largest in the world, being 18 hands high. He was sired by a Mambrino Patchen, from a Clay dam; he has shown a 2:40 gait. There is a report of a horse bred near New Orleans reaching 20 hands, but he was not a trotting horse. It is probable the Skidmore horse has been fed on Homestead superphosphate, or some such stimulant, to cause such a growth.

## The Farm.

### Growing Wheat Cheaply.

A correspondent of the Philadelphia Press thus treats the above subject:

"The example of English farmers who till much dearer lands than any used for farming purposes in this country should be greatly encouraging to us. For many years the average wheat crop of England has been twenty-eight or twenty-nine bushels per acre. When it falls below this yield the crop is reckoned a failure. Several bad seasons in succession have reduced English wheat below this average, and this, quite as much as low prices, has discouraged the farmers of that country. If they should get the crop to which the fertility of their soil fairly entitles them wheat growing would be at least as profitable as any other part of farming. As it is, England still grows an amount of wheat greater than is produced on any other equal area of land in the world. This could not be if the ordinary crop were grown at a loss.

"The danger of wheat growing in this country is that low prices will be made the excuse for poorer farming, rather than incentive to better culture and more thorough manuring. The average yield of wheat in this country is little more than eleven bushels per acre, or considerably less than half that of English farmers. This yield is already too small to bear decreasing. There is no possible hope that prices of wheat will advance sufficiently to make poor crops pay. While the great bulk of our wheat is sold at a loss, the main exceptions are where crops are considerably above the average are obtained. Such crops are grown on new virgin lands and also experienced and careful wheat growers who have built up their farms by a system of manuring and underdrainage. The first method of wheat growing is necessarily temporary, but the farmer who on long cultivated fields is able to grow crops of wheat twenty-five to thirty-five or forty bushels per acre has to a great extent made himself independent of prices. Not even the Indian peasant working for eight or ten cents per day can compete with him, for the Indian farming is poor, the crop small per acre, and of inferior quality.

"One of the means for growing wheat cheaply is by growing it in connection with other crops. I live in a section where up to thirty or forty years ago wheat was grown almost exclusively. Failure of wheat compelled a change to a mixed system of farming. Into this wheat has entered as an important factor, growing more important every year. Despite low prices, wheat farmers sow as much as they ever did, and more than they would have thought of sowing be-

fore eight or ten years ago. The use of commercial fertilizers and of harvesting machines enables them to do this. A wheat crop is the almost universal preliminary to seeding down a field. The crop sown the previous fall is out of the way until the harvest. If we had our wheat crop alone to depend on not a bushel would we sell at present prices. But we sell corn, oats, barley, potatoes, fruit and other minor farm products, and can grow all of these just as well or perhaps a little better for having to sow some wheat. It gives employment to men and teams when they would otherwise have no paying work to do. A few acres of wheat sown the fall before leaves the farmer more time to care for the remainder of the farm and make it all productive. Hence, while wheat alone could not be made to pay at present prices, it is the one crop in all our system of mixed husbandry which most farmers could least afford to spare."

### The Sheep Gad-fly.

Stephen Powers, in the Country Gentleman, says in reference to this annoyance to sheep:

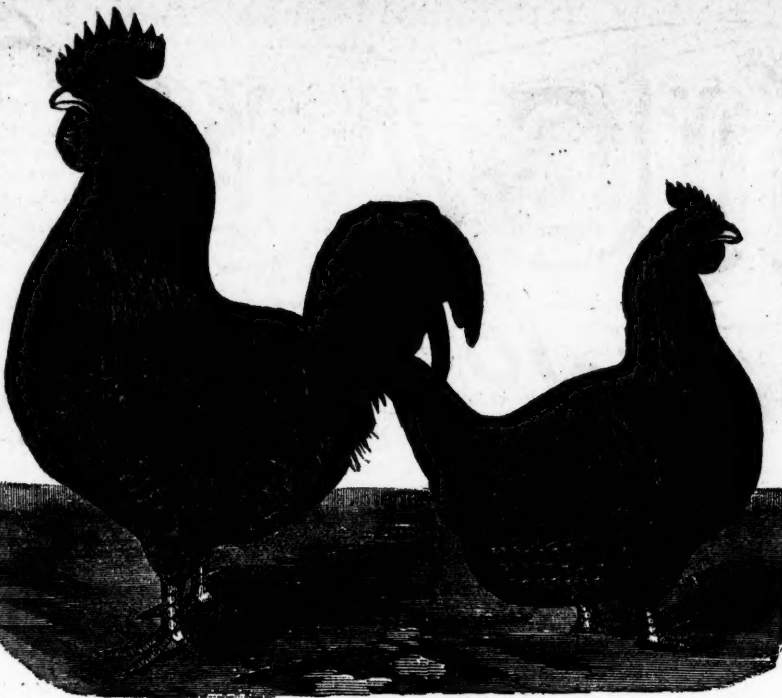
These flies prevail worst near or in a forest, or on lowlands, about moist pastures, swamps, &c. Notwithstanding they are thickest in the woods, the sheep congregate there for the sake of the shade. And they find, also, in the woods a means of self-protection against their enemy—that is, the dust. Every sheep is observed to have its stamping ground—a little basin stamped out at the foot of a tree, or beside a log, or deep within the recesses of a fallen tree-top—where it lies down and gets up, turns around, and lies down again a score of times in a day. Sometimes it will lie here a long time, with its nose outstretched close to the ground, inhaling the dust. I consider this natural dust-bath a great protection against the gad-fly, and almost as necessary to the sheep's best welfare as it is to the hen's. It not only wards off the fly, but the foot-rot as well.

The next best thing is an open shed, to which the sheep can resort during the heat of the day. This should be dark and cool, to make it attractive. The sheep soon learn that a room of this sort is almost exempt from the visitations of their enemy, and they will travel a considerable distance for the privilege of passing the day under its shelter. But after all has been done and provided, there is a margin of danger toward the close of the afternoon. The sheep get hungry during the long hot day, and they venture forth before sunset, at the very time when the fly is probably the most active of the whole day. Now it is that the mischief is done; the egg is laid in the nostril.

After the grub has effected a lodgment in the nasal sinuses, I have always found it unsatisfactory to attempt to dislodge it. The mucous membrane lining these cavities is so sensitive (a fact attested by the suffering and death of the animal from a cause apparently so trivial, often beclouding the judgment of the farmer as to the real nature of the ailment)—as to make it dangerous to bring in contact with it anything strong enough to kill or loosen the grub. An injection of turpentine is the best thing, both as a remedy and as a preventive, though, as I said above, no remedy can be depended on as certain. I have found it well worth while to go over the entire flock of lambs twice during the season, as a preventive measure, and at weaning, and again about October 15. For this purpose a common blow syringe, to be had at the drug store, is best. Let the operator take the lamb between his legs, standing up naturally, charge the syringe with a mixture of equal parts of turpentine and linsed oil, introduce the nozzle carefully the whole length of the nasal passage (in a grown sheep this is nearly or quite six inches long), and then with a quick smart squirt about a tea-spoonful. Let the lamb have its head until it recovers from the shock; then treat the other nostril the same way.

### Handling and Judging Cattle.

The New England Farmer says that at the Norwich Farmers' meeting, Prof. Brown, of Canada, gave a "barn floor lecture," reported as follows: A cow and a pair of oxen were brought into a ring, and while the Professor handled the animals over, he talked to his audience as to a class of students at school. The cow looked like a Jersey, and the Professor stated that it is impossible to determine with certainty by the looks of an animal whether it is a full blood or a grade. A record only can determine that point. The color of an animal is a matter purely of fancy. The color does not determine the intrinsic worth of an animal so far as relates to its feeding or productive capacity, nor is there the difference in breeds that many suppose. A healthy animal will lay on flesh or fat according to the amount of food consumed, but some breeds lay the flesh upon one part of the body and some on other parts, and some have a good deal more frame to build upon than others. Of course those animals are most desirable as feeders that can lay on the flesh and fat where it will be worth the most money per pound in market. In selecting a dairy cow he likes a long face, especially from the eye downward, also a wide nostril. He likes a cow with a face that will hold water brought to a horizontal position, but would avoid a dish face on a bull. He likes a fatish or oval horn rather than a round one, but likes far better to see no horns at all. Horns are not needed upon cattle kept in domestication. We do not want our animals to fight each other. A cow's neck should be lady-like, not heavy and masculine. The idea of a general purpose cow in a measure absurd, yet there is something in it. The fore-quarters should be deep rather than wide, and the neck should fall from the shoulders forward, giving what is termed a ewe neck. Then there should be lots of room for the food, a good large barrel. A quiet eye betokens a quiet feeder that will use its feed to a good purpose. A thin, delicate skin is not as desirable as a thicker one with a mellow feeling beneath it. Fine, furry hair is better than a coarse coat, and if the hair is inclined to curl, all the better. He had a good word for the Devons as being well adapted to a hilly pasture, and for working cattle. They had been called the pony breed of cattle in England, but they are not heavy enough for beef making. We want something that will make ramps and roasts more rapidly, like the Shorthorn, Hereford and Polled Angus.



Dimon Creepers, Bred by John Dimon, Windsor, Ont.

### How to Take Off a Hide.

The Leather Review has the following instructions for taking off and preserving hides:

In taking off a hide or calfskin never cut the throat crosswise in the least. Slit the skin from the breast to the tail, and from the breast to the jaw; then cut around each leg to the hoof. Slit the hind leg from the hoof up directly over the gambrel and the forward legs in front, directly over the knee, to the top of the brisket bone. This leaves the hide or skin, then, in the proper shape for finishing.

Skin the head and legs carefully, to avoid cutting them; then, commencing at the head, draw or fist off the skin without any further use of the knife, thereby avoiding the holes and cuts that almost spoil so many calfskins. Some farmers use a windlass to draw the dry skins and others use a horse; but one or two men can do it a great deal more quickly and easily.

When taken off, lay the hide or skin flat on the floor in a cool place where the sun can not shine upon it, and cover it with salt, rather fine salt being better than too coarse salt. Do not roll it up, but let it remain in the salt until you take off another; then place that one upon the other, salting freely as before, and so on until you get enough to make quite a pile; then commence another pile in the same manner. Do not be afraid to use salt freely; what the skins do not require will shake off and can be used again.

If you prefer to dry out your skins before selling them be sure that they are thoroughly cured with salt before drying them, and then that they are thoroughly dried before being baled up for shipment.

Never dry out a skin without having it salted as described, to preserve it from moths and other injuries on the hair side, which are liable to occur if the skins are not properly salted before being dried out.

If your skins remain on hand very long after being dried out, before delivery to the tanner, even if salted, watch them carefully to detect any indications of moths or worms on the hair, and if any are discovered have the skins vigorously whipped with a stick so often that they shall be wholly eradicated from the surface. In this way they will work serious injury in a very short time.

### Why It Doesn't Pay to Grow Grain or Raise Cattle in the British Isles.

It seems now to be settled that under existing conditions it does not pay to grow grain or raise cattle in the best part of the Continent and the British Isles. For this curious and alarming state of things the world is indebted to the extension of steam navigation to all parts of the earth. Wheat, barley, oats, etc., can be grown on almost any arable land. It follows that wherever the factors are most favorable that region gets the benefit of this cheap access to the consuming market. A few years ago India contributed but 90,000 bushels of wheat to countries outside of the Peninsula. Its export supply is now about 50,000,000 bushels, and with the extension of the railway system it will have fully 100,000,000 for outside consumption.

The secret of India's ability to sell in distant markets is the extraordinary cheapness of labor, which does not command more than 10 cents a day of our money. The United States, Australia, and New Zealand can produce wheat and lay it down in Liverpool at a price which is simply ruinous to the English and European wheat-grower. This is because of cheaper and more fertile lands and the use of machinery on the broad prairies and plains, which dispenses with costly labor. Recent statistics show that tenant farmers in the British Islands who confine themselves to cereals and cattle-raising cannot make both ends meet if they undertake to pay their rent. This accounts for the distress among the agricultural classes in the old world, and more especially for the abject misery of the Irish people, who have no diversified industries, because the island is without coal or iron, and British laws discourage manufactures of any kind in that unhappy country.

This inability to raise grain is effecting a social revolution. It has struck a fatal blow at the authority and prestige of the peers, who are the great landowners, and it will end in agricultural land being transferred to the peasants in England and Scotland as well as Ireland. These agricultural workers having no rents to pay, will be able to make a living out of the soil, for they can raise perishable vegetables, poultry, eggs, and dairy products, as these are safe from foreign competition. In the meantime the cities of Europe are growing rapidly, and are yearly consuming more and more, not only of the grain and cattle raised in distant regions, but also of the vegetables, poultry, fruit, and dairy products of near-by production. This explanation of the agricultural situation throws a good deal of light upon the political and social changes now taking place in the old world.—*Demoerist's Monthly.*

**BEETS** should be gathered before freezing weather, as the tops are a good green fodder for cattle, but are worthless if frosted. The sugar beet has been kept one year from pulling. If a beet is grown to 20 pounds it will be juicy.

### Agricultural Items.

**THE** National Live Stock Journal is right in saying that the questions, what is the cost of a bushel of wheat, a pound of butter or of beef, is about like asking what is the length of a string or the size of a piece of chalk. The cost depends upon the circumstances. It may cost a certain farmer so much to produce a certain amount of produce, another farmer on a different soil, with different stock, different tools and methods, cannot use these figures with any success. The only way to find out what produce costs, is for each farmer to figure on his own work and not accept the figures of others. The closer farmers follow this rule, the nearer they will come to success.—*Rural New Yorker.*

**THE** N. E. Farmer says: "Some things were known more than sixty years ago that might be useful to-day. One of these is the cause of potato disease. It was known to be caused by moisture and heat. As a preventive, one simple yet effective rule was to cultivate the potato in hills, use a plow and make a mound of earth of good height around the plants and dishing on the top. In a dry time the dews will follow the stalks to the centre, where the roots will get the benefit. When there is an abundance of rain the surplus over and above what is needed will drain out."

The eleven greatest dairy States, including New York, Pennsylvania, Ohio, Indiana, Michigan, Illinois, Wisconsin, Iowa, Minnesota, Missouri and Kansas had, as shown by the last census, 7,524,643 cows, a pretty large sum invested in the dairy business, which has been seriously affected by the bogus butter manufacturers.

It is a curious fact that railroads and potato beetles are by no means wholly disconnected. In fact, the beetles have done most of their traveling from their native Colorado by the railroads, deadheading themselves through on passenger and freight cars, and even luxuriating in the Pullman cars occasionally. One spot in the United States at least is free from these pests, which is the Southern mountain region, where the railroad has not yet penetrated. Along the road there is plenty of them, but 20 or 30 miles away, with dense forests intervening, the farmers have never yet seen them and the majority have never heard of them.

A correspondent of the Ohio Farmer thinks that in cutting clover for ordinary curing, that cut in the afternoon and allowed to wilt over night is worked a great deal faster than the morning cut. The only philosophy that applies to it is that clover absorbs a large amount of dew aside from its own sap, and there is a double amount of moisture to dry out. In the afternoon this surplus is well evaporated, and when it is cut, even if coated with falling dew, it has no power to absorb it.

## The Poultry Yard.

### DIMON CREEPERS.

The above is a fair representation of the fowls known as Dimon Creepers, originated by Mr. John Dimon, of Windsor, Ont. They are hawk or Dominique in color, with very short yellow legs, heavy compact bodies, and about the size of Plymouth Rocks. Mr. Dimon's idea in breeding them was to produce a good table fowl, hardy enough to withstand northern winters, good layers, quiet and easily handled, with legs so short that they are practically unable to scratch. He says they can be allowed full liberty in the garden, to its benefit as well as of the fowls. They can be fenced in as easily as geese, as they are not flyers, and have very quiet dispositions.

**THE** Racine Agriculturist makes the following suggestion in regard to feeding runs to fowls: Do not fail to plow the feed runs after a shower, and seed them bountifully with corn and oats. The sweepings from the barn floor that contain timothy may be added to advantage. If possible, keep the fowls excluded for a few days, until the grass appears above the ground and obtains a good start. Both corn and oats grow very rapidly during the warm weather of July and August, and furnish excellent green food for poultry. Unless the yard is overstocked a considerable part of the corn will grow to its full height and afford excellent shelter from the sun. More or less of the oats will come to maturity and supply food and enjoyment to the chickens.

**GRAVEL** serves the same purpose with birds that teeth do with quadrupeds. The grinding in the gizzard may be heard by placing the ear near the fowls when their stomachs are full and digestion is taking place. The sound of the gravel stones grinding and rubbing against the grain is especially audible in the case of ducks that are about half grown, at which time they are increasing in size very fast, and digestion proceeds very rapidly.

New corn is better than old for fattening. It should be the staple food. Cornmeal, mixed with milk, fed once a day, and cracked or whole corn the rest of the time, with an occasional feed of vegetables to keep up the appetite, is acceptable diet.

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Horticultural.

CULTIVATION OF NUT-BEARING TREES.

BY W. A. SMITH, OF BENTON HARBOR.

Paper read at the late meeting of the West Michigan Fruit-Growers' Society.

In every well timbered country there are three distinct and well defined periods or epochs. The first period furnishes the conditions for a wild or savage state of man, and during its continuance, nature provides in great measure for the simple wants of her children. When the supply in any locality becomes exhausted they need only migrate to other and more favorable localities, like the birds of the air and the fish of the sea. By and by the pioneer comes, and the country is wild, the land is divided in its primeval forests, the sound of the woodman's ax has not been heard to the virgin soil for hundreds, thousands—yes, perhaps millions—of years in the way of human progress and must at least in part be removed. The land must be tilled in order that man may rely upon his own energy and resources for the necessities of life.

In a new country, before railroads are constructed, and not being favored with water transportation, timber is of little or no value save for fuel and the rude cabins of the best settlers. Hence, in days not long past, the logging bee was a common frolic. The timber was burned upon the ground where it grew, and the ashes added additional fertility to the soil already enriched by the decomposition of vegetable matter for unknown ages.

The second epoch is the period of commercial activity in the lumber regions. Saw-mills are erected at all convenient points, and there is logging in the winter, running logs in the spring, and a general activity in the lumber business the balance of the year. In our own Peninsular State this system is entirely and systematically in vogue even now.

Those of us who came to Michigan not more than a quarter of a century ago remember well the majestic and magnificent stretches of forest over much of her rich domain. In 1838, fifty years ago, Michigan entered upon her career as a State. Then there was one of the best, if not the best, timbered State in the Union. Her timber, even to the present time, has been a source of manifold wealth to her citizens. The lumberman had his wages, the capitalist his large percentage of the money invested. The tax has been applied to her forests with a ruthless and savage hand. "To-day is the day of our need," says the lumberman. "Let tomorrow take care of itself." And how swiftly and how thoroughly has he accomplished his work! Fifty years, a mere point in the cycle of time—only a day, as it were, in the age of a State—and yet we are brought face to face with one of the most important problems of agriculture and prosperous statehood, viz: How can we best protect and preserve our remaining timber? Already our climatic changes have been mainly for the worse—summers hotter, winters colder, droughts and floods more frequent and destructive. To-day the remaining pine timber of the State is mainly in the hands of capitalists who will, in the next twelve or fifteen years, use up about all the valuable pine, at least in the southern peninsula. In 1900, sixty-five years of statehood, will be stripped from Michigan almost entirely her great pine forests, and about another quarter of a century thereafter her hardwood timber will likewise be used up. This estimate is upon the present basis of consumption, which is likely to continue.

As a people, we shrink from and abhor too much government, hence we will be slow to adopt (if indeed we ever do) the European system of forestry. There the government owns large tracts of timber lands, and has reduced forestry to a fixed and well defined science. In some of those countries even private timber claims are placed under governmental control, and thus instead of waste, depletion, and destruction of timber for immediate gain, their forests are made to yield them a perpetual revenue, which is yearly becoming more valuable. Instead of using up the principal, the interest is accumulating new principal.

In this country, without a radical change in our national and State laws, in our system of growth and culture, little can be hoped for in the future. Sooner or later our national and State governments will, by force of circumstances, be compelled to adopt a radical system of forestry. For the present our timber preserves and culture will be mainly in the hands of individual owners of the soil. Singly we can do but little, collectively we can do much. Landed proprietors will soon learn that growing timber can be made as profitable as growing grain and fruit; and when they once plainly see this everlasting dollar the problem will be solved.

As a people we invest millions, sometimes, in broken life insurance companies, for the benefit of our families when we are laid away. This shows a disposition on our part to leave that portion of mankind in better circumstances for our going. If we would pursue a like policy in timber culture we might not only leave our families in better circumstances but make the world more prosperous and happy, and the earth more beautiful and homelike.

But men must see to-day and reap to-morrow, and the idea of deferred profits for one, two, three, or more generations is a stumbling block to too many. On this point we do not act like wise, rational beings. He who lives for the present alone, without regard to the welfare of the future, is at enmity to the best interests of mankind. But we overlook the fact that timber culture can be made a sure and safe investment in a much shorter period of time than is usually reckoned upon. Many varieties of forest trees grow rapidly, and in one or two decades are available for various purposes. While growing they make wind-breaks, shelter crops and stock, exclude moisture, and beautify the earth. For the best interests of agriculture and every interest dependent upon that, about one-fourth of the land should remain permanently in timber. Every man or woman who owns a country homestead should see to it that part of said homestead be well stocked with valuable timber. Among the trees should be a liberal

supply of nut-bearing trees. The walnut will grow on any soil that will produce good corn, and even on soil that will not grow good corn; for its native habitat is rocky, hilly, and mountainous land. Yet it will readily adapt itself to any soil and locality suitable for farming purposes, and prove fruitful. This and the black chestnut are the delight of the small boy in the fall of the year. Then why not grow them? They soon come into bearing and will continue to bear beautiful crops of wholesome and delicious nuts for many generations of boys in the dim future. These trees, too, are ornamental and useful for many other purposes. The black walnut is to-day the most valuable timber tree in this latitude. I would now rather have a thrifty, growing, young black walnut orchard than an apple orchard of equal extent, and of the most approved varieties. Within the last thirty years I have seen large, stately black walnut trees felled and split into common rails for fencing purposes, which, if they were standing to-day and sound, would be worth more per acre than an acre of the best improved land upon which they grew. The black walnut in its native state is not only a good tree, but always indicates a good soil. This fact should be remembered in growing this tree.

In timber culture due regard should be had for the different varieties of timber and their adaptability to particular kinds of soil, also the various periods of maturity of the various species. This knowledge will enable us to grow different varieties upon the same tract of land to the best advantage. For 200 years France has had her forestry laws for the protection and culture of timber. In Germany the forestry and timber culture laws date still further back, under which a system of forestry schools has been established, which for thoroughness and system in every detail connected with the growth of timber is superior to that of any other country.

In many of the European countries much of the timber land is owned and under the direct control of the governments. The forests are divided and subdivided, as cities into wards and precincts. The police force, not being influenced by ballots from trees, are expected to do impartial justice to all. When the age of greatest usefulness of the various timber has arrived, it is removed and room is made for a new crop. In this way they have succeeded in growing not only three times as much timber per acre as the unaided forest produces, but timber of superior quality. They thus make their forests pay a revenue, besides beautifying and adorning the country. We can hardly imagine anything in nature more lovely and inviting than a clean, well kept forest. The various periods of maturity or greatest usefulness is found to be as follows, in their latitude and under good management: Larch and birch, 50 to 60 years; locust and maritime pine, 60 to 70 years; Scotch pine, 50 to 90; beech, 80 to 140; ash, 90 to 100; chestnut, 90 to 120; spruce, 90 to 140, fir, 100 to 140; elm, 100 to 140, oak, 100 to 200. Our black walnut will probably require nearly the same time as chestnut.

For roadside planting the rock maple is perhaps one of the most desirable trees we have—easy to propagate, a free grower, and cleanly in all seasons. To give the best satisfaction it should be transplanted into nursery grounds a year or two before being permanently transplanted. This tree when old enough will furnish refreshing shade in summer, a delicious sweet in spring, and a valuable wood for manufacturing purposes. I cannot help noting here the great services rendered the cause of timber culture in this and other States by that indefatigable worker, C. W. Garfield, in the last report of the State Horticultural society. The collations, reports, opinions, experiments, therein set forth and given to the world, although in fragmentary form, by Mr. Garfield, could entitle him to the gratitude of every well-wisher of the human race.

Let us see to it that we do something, individually and collectively, to rehabilitate our beautiful State, in part with timber-belts, wind-breaks, and shade tree for many beasts and birds.

If we set but one tree individually, somebody will rise up and call us blessed.

PEACH GROWING IN MICHIGAN.

At the recent meeting of the Western Michigan Fruit-Growers' Society Mr. A. S. Dyckman read a paper on this subject, in which estimates of the fruit grown in the State were given. Mr. Dyckman is one of the oldest and most successful peach-growers in the State, and his statements upon the subject are entitled to great weight. In the discussion which followed the reading of the paper, Mr. Harrison Hutchins, of Ganges, said that his neighborhood included Douglas, Fennville, and Saugatuck, and in it were not less than 250,000 peach trees. Mr. J. F. Barron, of Fennville said that from 35,000 bearing trees in that vicinity 234,000 baskets were shipped four years ago, since when there has not been a full crop. Mr. Hamilton thought Mr. Dyckman had placed the estimate nearly at one basket per tree of all ages, bearing and otherwise. J. G. Ramsdell, of Traverse City, thought the estimate too low. If it is not, we must be more careful in our investments. G. W. Griffin said there were in Casco township five or six hundred acres of trees three years old or more, containing 70,000 trees; there are 35,000 unbearing trees. Mr. Hutchins would quit the business if he thought the product only one basket per tree. Mr. Dyckman reminded that the estimate included all trees, young and old, in thrifty condition. He expects to see a ten-fold increase in the product in ten years. In 1873 and '74, when it was estimated there were 900,000 trees, the shipments were but 600,000 baskets. Many were young trees. James Gardiner, of Ganges, believed Mr. Dyckman's estimate correct. G. W. Richards, of the same place, thought it right for Crawford, Milsom, and Richmond, but too low for others. Our climate does not favor much setting of the varieties named, though what we have may by better fertilization be made to yield more. President Phillips, in answer to inquiry, said peach-growing was unsuccessful about Grand Haven and pomologists are turning attention to grapes; but he thought Mr. Dyckman's estimate high enough. Mr. Dyckman said his estimate of one million trees was divisible into 250,000 in Casco and South Haven; 500,000 in and about Fennville, Ganges, and Saugatuck, with 250,000 for the rest of the State. There are less now than in 1874. Mr. Barron

noted the lack of definite information on this important point, and thought some means should be employed to collect definite statistics.

Strawberry Blight.

A correspondent of the Rural New Yorker thus describes a quite prevalent disease of the strawberry plant: "Every strawberry grower is familiar with the white spots that occur on the leaves of certain varieties of the berry. This disease is very common from the Atlantic to the Pacific, yet very few know its real cause. The white spots are circular, about one-eighth of an inch in diameter, and surrounded by a dark red stripe. An examination of the spots with a lens will disclose in the center of the white spot a number of small mealy tufts. These little tufts are exceedingly minute, and their color resembles that of the spot so closely that it requires patience and close examination to find them. The small mealy tufts consist of an immense number of cylindrical bodies supported on slender stalks. These small bodies are the spores or reproductive bodies of a fungus known to botanists as Ramularia fragariae (Pk.). The disease then is not caused by the scalding heat of the sun, nor is it the work of insects; but it is caused by the minute parasite mentioned above.

"Many, if not all, of the higher plants serve as hosts for one or more species of fungi. Several of these parasites attack the strawberry, but the one mentioned is the most destructive. As far as made out, the life history of this fungus is about as follows: The vegetative portion of the fungus (called mycelium) consists of slender colorless threads, which are exceedingly minute, and first appear in the tissue of the leaf, ultimately destroying the vitality of the cells in their immediate vicinity and causing the white spots described above. The reproductive bodies are formed on the slender branching threads, beneath the epidermis of the leaf, and when they have attained the proper size, they rupture this covering and appear in the center of the white spot in small tufts.

"The disease is usually more abundant in old beds where the plants have become thick and matted. Strong plants that have received good cultivation are comparatively free from the attacks of the fungus. Certain varieties suffer more from the effect of the disease than others. Downing, Cumberland, Captain Jack, and Wilson usually blight badly; while Crescent, Bidwell, Jersey Queen, Monarch and Manchester are comparatively free from its attacks. Lime is one of the best known remedies; it should be applied when the leaves are wet, commencing early in spring, and repeating the operation every two or three weeks."

Plums.

A correspondent of the New England Farmer thus describes the methods of a New York plum grower who has been very successful with this fruit:

In the place of general advice in regard to this fruit I shall give the experience of T. S. Force, of Newburg, who exhibited several varieties at the last annual Orange County fair. His plum orchard is a large poultry yard containing half an acre, of which the ground is a good loam, resting on a heavy clay sub-soil. He bought trees but one year from the bud, set them out in autumn, and cut them back so that they began to form their head at two feet from the ground. He did not permit them to bear for the first three years.

During this period the ground about them was kept mellow by cultivation, and being rich enough to start with, received no fertilizers. It is his belief that over fertilization tends to cause the disease so well known as the black knot. During this growing and forming period Mr. Force gave careful attention to pruning. Budded trees are not even, symmetrical growers, but tend to send up a few very strong shoots that rob the rest of the tree of sustenance. Of course these must be cut well back. It is far better, however, not to let these rampant shoots grow to maturity, but pinch them back in early summer, thus causing them to throw out side branches. By summer pinching and rubbing off of tender shoots a tree can be made to grow in any shape we desire.

When the trees receive no summer pruning, Mr. Force advises that the branches be shortened in at least one-half in the spring, while some shoots are cut back even more rigorously. At the age of four or five years, according to the vigor of the trees, he permits them to bear. Now cultivation ceases, and the ground is left to grow hard, but not weedy or grassy, beneath the boughs. Every spring, just as the blossoms are falling, he spreads evenly under the branches four quarts of salt. While the trees thrive and grow fruitful with this fertilizer, the curculio, or plum weevil, does not appear to find it at all to his taste. His remedy for the black knot is to cut off and burn the small boughs and twigs affected. If the disease appears in the side of a limb or in the stem, he cuts out all trace of it, and paints the wound with a wash of gun shellac and alcohol.

Trees lose so heavily that the plums rest against one another. You will often find in moist, warm weather, decaying specimens. These should be removed at once, that the infection may not spread. In cutting out the interfering boughs do not take off the sharp-pointed spurs which are forming along the branches, for on these are mature, the fruit-buds. Mr. Force recommends the following ten varieties, named in the order of ripening: Canada; Orleans, a red-cheeked plum; McLoughlin, greenish, with pink cheek; Bradshaw, large red, with lilac bloom; Smith's Orleans, purple; Green Gage; Bleeker's Gage, golden yellow; Prune d'Ang, purple; Coe's Golden Drop; and Shropshire Damsel for preserves.

My Way for Watermelons.

Contrary to the experience of many growers I have found that the richer the soil, provided it be warm and light, the surer the success. The ground should be broken quite deep and thoroughly pulverized. I prefer marking both ways; the plants can be cultivated better. Two shovelfuls of good manure should be put in each cross. The best I have ever used was well rotted leaf mold and stable manure in alternate layers of equal proportion; this well rotted and turned over until thoroughly mixed. This may not rush the plant while young so much as all stable manure, but it will bring more and larger fruit. This can be mixed with

the soil in the hill or not; I so mix, but do not say it is best. Make good-sized hills, not too high, and drop at least a dozen seeds in each. This is important, for two reasons: So many plants die each other in raising the soil (which is so apt to become crusted on top) and they come up better; some seed give stronger plants than others and will bear better fruit; planting so many in the hill we are more apt to get strong plants; these can be selected after the plants are up, leaving two in a hill.

As soon as plants are up hoe, or if a small patch, loosening the soil with the fingers is better; the young plant is not so apt to be disturbed, which it should not be. I like deep cultivation for the first three times; then shallow until finished. Melons should be cultivated every week until the vines interfere. I plow the ground thoroughly between the rows each plowing. As to the "melon bug" the best remedy is to sift ashes or soot on the plants as soon as they are discovered to be infested; then hunt them while the dew is on the vines or while it is cool. They are then easier caught. I have tried kerosene, tobacco stems and tobacco juice, saltpetre, wheat bran—but none paid the trouble. As to pinching the vines I doubt if it pays; I could see no advantage; there may be a small per cent more melons, but on the average they are smaller.

After the melons are raised there is much in picking at the right time that makes them most profitable. I have heard farmers say they never pulled a ripe melon; they could not tell when the melon was ripe. The rind of melon left on the vine generally becomes hard and the pulp brittle. If left until properly matured the part in contact with the ground will be changed from a white to a pale yellow and upon close examination numerous small pimples somewhat like the measles will be noticed on the surface, particularly on the outer edge. With these signs, if the melon be gently pressed and it cracks inside it may be regarded as ripe. The top side of a melon when ripe is of a dull, lifeless brown color. Against melons thieves place a glass lantern on a box in the middle of the patch. They like darkness rather than light, because their deeds are evil.—N. Y. Tribune.

How to Prune the Currant and Gooseberry.

The method I use in pruning the currant, and which will apply to the gooseberry as well, differs in one respect from the usual advice given in the columns of the horticultural journals of the day, that of cutting back the new growth of the terminal branches about one-half, which will give all the following advantages over the old system of pruning, which was simply to cut out old, useless wood, and thin out that which remained. These advantages are:

1st. Strong, healthy growth at the top of the bush where we want it, and not in an increased number of suckers or sprouts at the bottom.

2d. Rank foliage, that will remain all season to protect the fruit from sun scalding, and also prolonging the picking and marketing season.

3d. Larger fruit and longer bunches, for the reason that all the short bunched small currents are produced at or near the terminal buds, and these being pruned off, leave only the best to be developed, and as it is a well known fact that the production of seed is the cause of exhaustion of the plant, therefore small currents produce just as much seed as large, and these being pruned off, relieve the bush of its greatest burden or cause of exhaustion.

4th. Regular bearing, for a strong, healthy bush is always able to bear its load of fruit, because with this mode of pruning and its advantages the bush grows stronger every year, and with these come

5th. Other advantages, such as very large bushes with fruit further from the ground, and consequently not liable to get splashed with dirt, and being able to grow very large plants less plants are required to the acre, and will do best planted not less than 5x5 feet, or 6x6 feet, when horse cultivation can be used both ways, and thus save a great deal of hand labor.

6th. By this mode of pruning, all the medium sized varieties may be made to produce almost as large fruit as the cherry currant.

7th. Currant plantations will last twenty years or more, because the vitality and vigor are always kept up.

And while I could name other advantages for this method of pruning, I have only to say that I have tried it on an acre of different varieties, and others have tried the same, and we have all had results more satisfactory than was anticipated. I believe that with this mode of pruning, currant culture can be made to give as good a profit for the capital invested as any fruit now grown for market.—Canadian Horticulturist.

Poisons for Destructive Insects.

Prof. S. A. Forbes, of Champaign, reported to the Illinois Horticultural Society a series of his experiments in the use of poisons on the codling moth and the curculio, which are the Country Gentleman condenses as follows: Ten apple trees were appropriated to three experiments, one with Paris green, one with London purple, and one with lime. These were all the orchard trees he could obtain control of, others not being available on account of pasturing stock. Paris green was applied on two trees, London purple on one, and lime on two; the other five were left untreated, for comparison. The spraying with the two arsenic poisons was very thoroughly performed, and was applied until every apple was reached and the leaves began to drip, about two gallons of the poisoned water being applied to each tree, requiring about four minutes for the work.

The strictest accuracy was observed in making the statements. The Paris green and London purple were analyzed to know their real composition; three-fourths of an ounce of Paris green was mixed with two and a half gallons of water, giving the fluid a decidedly green tint, and being about twice as strong as commonly used. The first poisoning was made June 6th, when the apples were about the size of peas, and a careful examination of the trees made on the 7th of July, but none were found on the sprayed trees which showed any injury from the codling moth, while the unsprayed trees had a large number of infested apples.

A week later, and after the two trees had been sprayed four times, 214 fallen apples were examined, and only 16 were affected by the codling moth, or only eight per cent;

while of the 570 from the unsprayed trees 58 per cent were found infested. A few days later, 100 apples on one of the poisoned trees had only two infested apples, while on the corresponding unsprayed one were 39. Three days later, 177 were picked up under the poisoned tree, and 370 under the unsprayed one; the former had 33 per cent infested and the latter 68 per cent. A week afterward, 56 were picked up under the sprayed tree, and 120 under the other—with 14 per cent of the former wormy, and 70 of the latter. Similar countings, with nearly the same results, were made twice afterward.

The whole number of fallen apples examined from the poisoned tree during the whole season, amounted to 665, and 1,037 from the other; 32 per cent of the former were infested, and 65 per cent of the latter. Of the ripened apples, 178 were infested on the sprayed tree, and 591 on the unsprayed one—being as 21 to 75 per cent. Very nearly the same result was found on the other sprayed and unsprayed trees.

With London purple, the spraying was much less successful, there being only ten per cent difference between the treated and untreated trees. It would be interesting to know if there is usually, with other experiments, so great a difference between the results with the two forms of the poison, Paris green being arsenic combined with copper, while in London purple it is combined with lime.

In the experiments with lime alone, which was applied by mixing it with water, and showering in sufficient quantity to slightly wilt the leaves when it dried, no appreciable effect could be perceived in repelling the codling moth.

The experiments with Paris green and London purple on plum trees, for protection against the curculio, were only partially successful, the former diminishing curculio marks less than one-half, and the latter one-fifth.

Prof. Forbes admits that these poisons were used in excessive quantity on the apple trees for the codling moth, the spraying having been performed at eight different times, and somewhat scorching the leaves. A sufficient spraying, he estimates, can be performed at a cost of ten cents a tree, including implements, labor and material.

The last spraying was done early in September, two months later than in common practice, after which a two days' rain storm occurred. Immediately afterward a number of the apples were gathered and submitted to careful chemical examination, when some arsenic was still found adhering to them, and to an amount that seventy-four apples would convey a poisonous dose. It would be obviously unsafe to apply the insecticide within several weeks of the time of the ripening and gathering the apples.

Clubfoot and Cabbage Flies.

I have had cabbage "clubfoot" under all conditions, except those of rapid and perfect growth in a spot free from the plants of other years. Salt and plaster on a section of a bed one season caused all the plants in that spot to clubfoot. Planted in a greenhouse on the benches, the east side of the house, which was more shaded and not so well aired as the west side, produced clubfoot in nine-tenths of the plants. This year I have not seen a clubfoot in my hot-beds, but not few flies. When the cabbage flies are abundant the chances are that clubfoot will appear. So far as I can determine from evidence and from observation, clubfoot is the result of defective growth in the seedbed. On the thirteen kinds of cabbage and cauliflower on trial this year I have not found a single clubfoot; this is quite unusual, but the weather has been unusually favorable. It may appear in the late kinds, the seeds of which are yet to be planted in open ground. Some years I plant in drills and some in beds; this year in drills. The cabbage-fly can be kept off by working, hoeing, weeding, watering, dusting—anything that will disturb the flies and keep them in motion. I have a notion they could be driven from the bed by walking through it in the same direction many times; they can be driven like a flock of sheep.—W. H. Bull, in N. Y. Tribune.

Horticultural Notes.

Freshly slaked lime sprinkled on the young turnips will preserve them from the attacks of the flea-beetle, *Haltica striolata*. It should be applied when the dews are on.

The red pepper, *Capiscum annuum*, though now cultivated in all tropical countries, was probably originally derived from the tropical regions of South America. Research has revealed evidence on this point until it is almost certain that this plant, with the potato and the tomato, was a vegetable treasure of the new world.

This common weed known as wild mustard is an annual plant and can easily be killed by mowing it when in blossom. If the seeds are permitted to ripen and fall they will stock the land for many years, as being oily, they will remain sound for a long time. The only remedy for this bad weed is to destroy it before it seeds.

SAYS THE N. Y. TRIBUNE: "The future for American fruit-growers will look brighter and more promising when we learn to produce less No. 2s and of better quality and then keep them out of the market. This is only the text for quite an article, which each must write out, or think out, for himself, and when done it will be worth more than a penny a line.

THE INDIANA FARMER says: "Mr. T. S. Connet, in Irvington, has a method of training raspberries that is worthy of imitation. He stretches a wire along each row about two feet from the ground, fastened to poles at each end, supported every rod or so with a light stake. The vines are spread out fan shape and tied to the wire. In this form they are convenient for plowing and picking. He is quite successful in growing them.

FARMERS who have pear trees which have been bearing for years and upon which the fruit shows signs of degeneration, are reminded that about a half bushel (if the supply is large) of good wood ashes, sprinkled about the tree, as far as the roots extend, will be a most effective aid in restoring it to its original excellence. If good ashes are not attainable potash in some other form will all the bill.—Orange County Farmer.

JUDGE MILLER says in the Rural World, that he finds the Empire State and Niagara grapes sound to the last bud, after the late winter at that place, and the President about as hardy. He finds inverted sods the best material to cover tender grapes when laid down for winter.

NEW ADVERTISEMENTS.

NEW ADVERTISEMENTS.

NURSERY STOCK FALL 1886

The Old and Reliable SYRACUSE NURSERIES Come to the Front for the Fall of '86! With the choicest stock of their specialties, STANLEY AND APPLE, SYDNEY AND DWARF PEARS, PLUMS and ORCHARD TREES, and all the young Thrifts and Well Rooted, All a very superior assortment of GENERAL NURSERY STOCK to be PRUIT and ORNAMENTAL TREES, including all the popular ORNAMENTAL TREES, SHRUBS and ROSES. All Nurserymen and Dealers are cordially invited to inspect this superior stock or to correspond with us, before placing their orders for the coming Fall. When writing ALWAYS MENTION THIS PAPER. SMITH, POWELL & LAMB, Syracuse, New York.

ter, better than earth. Their weight holds down the vines, and they are less likely to cause rotting of the buds. Mr. M. finds it better not to cover the old stem, but merely the younger shoots, the main vine being thus bent in a bow, and allowed to remain in this form for some days after the sods are removed in the spring, so that the lower buds will start more evenly.

A CORRESPONDENT of the Rural New Yorker says: "For the past two seasons I have grown so large a number of crossed seedlings of the tomato that I could not afford them hotbed room. Both seasons I have been surprised at the early maturity of their fruit, as well as by the fact that the young plants were not injured by late spring frosts. Whoever knew a tomato plant that came up from self-seed to be injured by frost in spring? I venture to guess that if we were to do away with hotbeds we should have before many generations of tomatoes that would ripen their fruit as early as, and be far more hardy than our hot-bed plants."

Apiarian.

Mysteries of a Bee Hive.

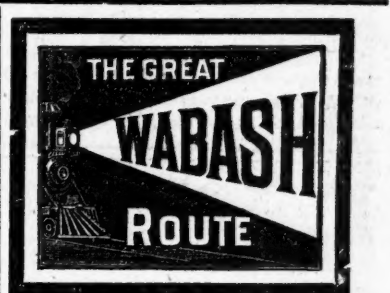
A life time may be spent in investigating the mysteries hidden in a bee hive, and still half the secrets would remain undiscovered. The formation of the cell has long been a celebrated problem for the mathematician, while the changes which the honey undergoes offer at least an equal interest to the chemist. Every one knows what honey from the comb is like. It is a clear yellow syrup, without a trace of solid sugar in it! Upon straining however, it gradually assumes a crystalline appearance—it candles, as the saying is, and ultimately becomes a solid lump of sugar. It has not been suspected that this change was due to a photographic action; that the same agent which alters the molecular arrangement of iodine of silver on the excited collodion plate and determines the formation of camphor and iodine crystals in a bottle causes the syrup honey to assume a crystalline form. This, however, is the case. M. Scheibler has inclosed honey in stoppered flasks, some of which he has kept in perfect darkness, while others have been exposed to the light. The invariable results have been that the sunned portion rapidly crystallizes, while that kept in the dark has remained perfectly liquid. We now see why bees work in perfect darkness, and why they are so careful to obscure the glass windows which are sometimes placed in their hives. The existence of their young depends on the liquidity of saccharine food presented to them; and if light were allowed access to the syrup it would gradually acquire a more or less solid consistency; it would seal up the cells, and in all probability prove fatal to the inmates of the hive. We will also state that whoever may attempt getting up a hive of any merit they must observe the one thing needful, that of perfect darkness within the hive, if they expect to succeed. The nearer the natural laws are observed by man in the management of bees, the better will be the results and more certain will be his success.

It is said that what is known among apiarists as the "Wiley lie," meaning the statement made by Dr. Wiley that combs were manufactured of paraffine and filled with glucose to be put upon the market, an assertion which the author afterward stated he meant as a "scientific pleasantry," found a place in Appleton's Cyclopaedia for 1881, in spite of contradictions by apiarists. This shows how prone mankind is to accept a statement made by a person in a prominent position who speaks "as one having authority," without investigation, with blind credulity. The utmost that can be done toward the manufacture of "artificial comb" is in the way of producing foundation, while bee-keepers have learned that glucose is as demoralizing to bees as it is injurious to the human family.

W. Z. HUTCHINSON says, in the Country Gentleman: I attend most of our largest and best bee conventions, read nearly all of the bee papers, and have a large correspondence with beekeepers; and to the best of my knowledge and belief, the feeding back of extracted honey, for the purpose of producing comb honey, has practically been abandoned, simply because it is unprofitable. "Ah," says one, "how about feeding sugar?" My friend, the only possible object in feeding sugar would be because it was cheaper than honey. Sugar is worth at wholesale about six and a half cents, while light extracted honey is in light demand at from five to seven cents. If an apiarist buys sugar, he must pay freight and cartage, while he has the honey on hand. If he sells the honey, he is compelled to pay cartage, freight and commission; consequently, the honey is really cheaper in the end for him to feed. "How about glucose?" When "feeding back," a large quantity of the feed is stored in the brood nest and no apiarist who wished to carry his bees through the succeeding winter would be guilty of feeding glucose. Self-interest alone would prevent that.

MRS. HARRISON says, in the Prairie Farmer: To save a queen when balled, throw the entire mass into water; then self-preservation will occupy the attention of each bee, and she can be picked out without danger from stings or of injuring the queen. It is risky to pick off the bees from a balled queen, as they in the excitement are liable to sting her. Queens do not sting, but the sensation of holding one in the closed hand is peculiar.

HAILE'S HONEY is the best Cough Cure, 25 Cts., 50 Cts., 1.00. GLEN'S SULPHUR SOAP heals and beautifies, 25c. GERMAN CORN REMOVER kills Corns & Bunions, 50c. HILL'S HAIR & WHISKER DYE—Black & Brown, 50c. FINE'S TOOTHACHE DROPS cure in 1 Minute, 25c. DEAN'S RHEUMATIC PILLS are a sure cure, 50c.



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to Adrian, Auburn, Fort Wayne, Peru, Indianapolis, Louisville and points south; Lafayette, Danville, Decatur, Springfield, St. Louis, Kansas City, and points west and Southwest.

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New York Limited Exp.	11:30 a.m.	11:15 p.m.
Mail, via Main & Airline Ex.	11:30 a.m.	11:45 p.m.
Day Express	11:30 a.m.	11:45 p.m.
Kal. & 3 Rivers Accom'd	11:30 a.m.	11:45 p.m.
Evening Express	11:30 p.m.	11:45 a.m.
Pacific Express	11:30 p.m.	11:45 a.m.
GRAND RAPIDS TRAINS.		
Day Express	11:30 a.m.	11:45 p.m.
Grand Rapids Express	11:30 a.m.	11:45 p.m.
Night Express	11:30 p.m.	11:45 a.m.
SAGINAW AND BAY CITY TRAINS.		
Bay City & Saginaw	11:30 a.m.	11:45 p.m.
Macquie & Marquette Ex.	11:30 a.m.	11:45 p.m.
Night Express	11:30 p.m.	11:45 a.m.
TOLEDO TRAINS.		
Cincinnati Express	11:30 a.m.	11:45 p.m.
St. Cl., Cin., Cleve. & Col.	11:30 a.m.	11:45 p.m.
Grosse Ile Accom'd	11:30 a.m.	11:45 p.m.
Cincinnati Express	11:30 p.m.	11:45 a.m.
Toledo Express	11:30 p.m.	11:45 a.m.

Canada Division</



ne Observer says: The Ypsilanti  
eat men, who were billed to appear  
trial in this village, for obtaining







## Poetry.

## LOVE'S SEASON.

May, never ask, beloved, oh, why so late?  
Nor marvel I could see yet love thee not.  
Love's secrets lie within the book of fate,  
Unwritten and untold.

Who self same star shines in its lofty sphere,  
The poet sees and sees a hundred times,  
Before from silvery cloud emerging clear,  
To find a god-like strain.

The self same melody, unsealed, ignored,  
May float for years in the composer's brain.  
One day he careless strikes his harp's chord,  
To find a god-like strain.

And countless suns rise o'er the Summer sea,  
Before that rosy glow the painter caught,  
Transferred to canvass for all time to be,  
The fadeless dawn of thought.

So soul by soul for years may lay alone,  
Yet side by side; no mortal tongue can tell  
How word or smile or look doth make them one,  
Therein love's miracles!

## WHEN MY SHIP WENT DOWN.

Sank a palace in the sea,  
When my ship went down;  
Friends whose hearts were gold to me—  
Gone that ne'er again can be—  
'Twas the waters brown.  
There you lie, O ship, to-day,  
In the sand-bar stiff and gray!  
You who proudly sailed away  
From the splendid town.

Now the ocean's bitter cup  
Meets your trembling lip;  
Now your ghastly hulls look up  
From Disaster's grip.  
Ruin's note around you weave;  
But I have no time to grieve;  
I will promptly, I believe,  
Build another ship.

[Will Carleton.]

## Miscellaneous.

## THE ENGINEER'S STORY.

"This is about it," said John Scott, the engineer, as the train slowly crested a long, gradual grade. "You're atop of the Rocky Mountains now, ma'am."

Really Vaughn looked to left and to right, and was conscious of a feeling of disappointment. She had pictured the top of the Rocky Mountains as something quite different from this. Here were no frowning heights or sudden gulfs, only a wide rolling plateau, some distant peaks which did not look very high, and far ahead a glimpse of lower levels running down into the plains. It seemed hardly worth while to have come so far for so little.

"Really?" she said. "But where are the mountains? They don't look nearly so high as they did yesterday."

"Naturally, ma'am," responded the engineer; "things don't appear so high as they are. We're atop, you know."

"But there's no look-off, no wonderful distance, as from the top of Mount Washington. I confess I am disappointed."

"It's kind of queer," said John Scott, with a dry chuckle, "how folks from the West keep alluding to that little hill as if it were the standard of measurement. We don't think so much of it this way. Why, ma'am, you're about 2,000 feet higher this minute than if you was at the top of that little shuck of a Mount Washington that they all think so much of."

Miss Vaughn smiled, but she experienced a shock nevertheless. The New England mind does not easily accustom itself to hearing its sacred mountain thus lightly spoken against.

"Have you ever seen Mount Washington?" she asked.

"Oh, bless you, yes!" replied John Scott, cheerfully. "I was raised out to Fryburg, and grew up alongside of it. I thought it was a pretty big concern when I was a boy, but now—oh, closed the sentence with a short, expressive laugh."

Miss Vaughn changed the subject. She was not offended. She had grown to like this rough, good-natured engineer in the course of the three days' journey, during which, favored as a relative of one of the directors of the road, she had several times been privileged to ride, as now, in the engineer's cab for a better view of the country.

"Have you been long on this road?" she asked.

"Pretty near ever since it opened. I run the third through train that came out of Chicago, and I haven't been off the line since, winter or summer, except for three months when I was laid up with a broken leg."

"This must look very differently in winter," said Miss Vaughn, noting the treeless distances, and the snows still glistening on the higher peaks to the left.

"You may believe it does! That first year, when the snow-sheds wasn't built, it was terrible. I was running that train that stuck in the snow seven days—perhaps you'll remember about it! It was in all the papers. I shan't ever forget that, not if I live to be as old as my grandfather, and he didn't die till he was ninety odd."

"Tell me about it," said Miss Vaughn, persuasively, seating herself on the high side bench of the cab, with that aloof attention which is so enticing to the story teller; and she was so far between in the long monotony of the overland journey to California; besides which, Miss Vaughn dearly loved a story.

"There ain't much to tell," said John Scott, with something perceptible in the tone of the feeling that prompts the young vocalist to complain of hoarseness. "I ain't any hand at telling things either." Then, won by Miss Vaughn's appealing eyes, he continued:

"We ran all fair and on time till we was about two hundred miles beyond Omaha. Then the snow began. It didn't seem much at first. The women folk in the train rather liked it. They all crowded to the windows to see, and the children huddled. Anything seemed a pleasant change after the sage-brush, I suppose. But as it went on coming, and the drifts grew deep, and the cars had to run slow, the older ones began to look serious, and I can tell you that we who had the charge of the train felt so."

"We was just between all the feeding stations, and we put on all the steam we could hoping to push through to where provisions could be got in case we had to stop. But it wasn't no use. The snow kept com-

I never see it come so. The flakes

looked as big as saucers, and the drifts piled so quick that, when we finally stuck, in ten minutes no one could see out of the windows. The train would have been clear buried over the whole length of the route every half-hour, and swept it off with brooms and shovels aboard, by good luck, or nothing else could have saved us from being buried upright. But it was terrible hard work, I can tell you. There wasn't no more laughing among the passengers by the time it came to that, and the children stopped hurrahing."

"Oh, the poor little things! What did they do? Were there many on board? Was there plenty for them to eat?"

"That was the worst of it. There wasn't plenty for any one to eat. We had stuck just midway of the feeding stations, and there wasn't a good deal of anything on board besides what the passengers had in their lunch baskets. One lady she had a tin of condensed milk, and they mixed that up for the babies—there was ten of them—and so they got on pretty well. But there was about five other children, not babies, but quite little, and I don't know what they would have done if it hadn't been for the young lady."

"The young lady?" said Miss Vaughn, looking up with surprise, for with the words a curious tremble had come into the engineer's voice, and a dark flush into his bronzed face.

"What young lady was that?"

It was a moment or two before John Scott answered the question.

"I don't know what she was called," he said, slowly. "I never knew. She was the only one on the train, so we just called her the young lady. She was traveling alone, but her folks had asked the conductor to look after her. She was going out to see a relative of hers—her brother, I guess, who was sick down to Sacramento. That was how she came to be there."

"Were the children under her care?"

"No, ma'am; she was all alone, as I told you; but she took them under her care from the very first. They had their fathers and mothers along—three of them had at least, and the other two had their mother and a nurse girl—but somehow no one but the young lady seemed to be able to do anything with them. The poor little things was half starved, you see, and there wasn't anything to amuse 'em in the dark car, and one of them, who was sickly, fretted all day and 'most all night, and the mother didn't seem to have no facility or no backbone to her; but whenever the young lady came round, that sick young one and all the rest would stop crying, and seem just as chipper as if it was summertime out-doors and the whole train full of candy."

"I don't see how she did it," he went on, meditatively, throwing a shovelful of coal in at the furnace door. "Some women is made that way, I suppose. As soon as we see how things were going, and how bad they were likely to be, that kind of girl set herself to keep along. She had a mighty gentle way with her, too. You'd never have guessed that she was so plucky. Plucky! By George, I never saw anything like her pluck."

"Was she pretty?" asked Miss Vaughn, urged by a truly feminine curiosity.

"Well, I don't know if you'd a called her so or not. We didn't think how she looked after the first. She was a slender-built girl, and her face looked sort of kind and bright both to me. Her voice was as soft—well, as soft as a voice can be, and it kind of sang when she felt happy. She looked you straight in the eyes when she spoke. I don't believe the worst man that ever lived could have told that girl a lie if it had been to save his life. Her hair was brown. She was different from girls in general, somehow."

"I think we may say that she was pretty," observed Miss Vaughn, with a little smile.

"I ain't so sure of that. There's plenty of ladies come over the road since that I suppose folks would say was better looking than she was. But I never see any face quite like hers. It was still, like a lake, and you seemed to feel as if there was depths to it. And the farther you went down, the sweeter it got. She never made any rustling when she walked. She wasn't that kind."

Another pause, which Miss Vaughn was careful not to break.

"I don't know what them children would 'a done without her," went on the engineer, as if talking to himself. Then with a sudden energy:

"I don't know what any of us would 'a done without her. The only trouble was that she couldn't be everywhere at once. There was a sick lady in the drawing-room at the end of one of the Pullmans. She had weak lungs, and was going out to California for her health. Well, the cold and snow brought on a hemorrhage. That was the second day after we was blocked. There wasn't no doctor on board, and her husband he was mighty scared. He come through to the front car to find the conductor, looking as pale as a ghost. 'My wife's a-dying,' said he. 'Ain't there no medical man on the train?' And when he said no, he just gave a groan. 'Then she must die,' he said. 'Great heavens! why did I bring her on this fatal journey?'"

"Perhaps the young lady'll have some remedies," suggested one of the porters; for we'd all got into the way already of turning to the young lady whenever things were wrong.

"Well, I went for her, and you never see any one so level-headed as she seemed to be. She knew just what to do; and she had the right medicine in her bag; and in less than an hour that poor lady was quite comfortable, and her husband the most relieved man that ever was. Then the young lady came along to where I was standing—there wasn't nothing for me to do, but I was waiting, for I didn't know but there might be—and said she: 'Mr. Scott, I am growing anxious about the fuel. Do you think there is plenty to last? Suppose we were to be kept here for a week?'"

"Now just think of it! Not one of us dumb fools had thought of that. You see we was expecting to be relieved from hour to hour, for we had telegraphed both ways, and the snow had stopped by that time, and none of us had any notion it was going to be the job it was to dig us out. Only the young lady had the sense to remember that it might take longer than we was calculating."

"Says I, 'If we are kept here for a week,

there won't be a shovelful of coals left for any of the fires, let alone the engine."

"Then don't you think," says she, in her soft voice, "that it would be a wise plan to get all the passengers together in one car, and keep a good fire up there, and let the other stoves go out? It's no matter if we are a little crowded," says she.

"Well, of course, it was the only thing to do, as we see at once when it was put into our heads. We took the car the sick lady was in, so she'd not have to be disturbed, and we made up beds for the children, and somehow all the passengers managed to pack in, train hands and all. It was a tight squeeze, but that didn't matter so much, because the weather was so awful cold."

"That was the way I come to see so much of the young lady. I hadn't anything to keep me about the engine, so I kind of detailed myself on to wait on her. She was busy all day long doing things for the rest. It's queer how people's characters come out at such times. We got to know all about each other. People stopped siring and am'am-ing and being polite, and just showed for what they were worth. The selfish ones, and the shirks, and the cowards, and the mean cusses who wanted to blame some one besides the Almighty for sending the weather—there wa'n't no use for any of them to try to hide themselves any more than it was for the other kind. The women, as a rule, bore up better than the men. It comes natural, I suppose, for a woman to be kind and silent and pale and patient when she's suffering. But the young lady wasn't that sort, either. She was as bright as a button all along. You'd have supposed from her face she was having just the best kind of a time."

"I can see her now, standing before the stove roasting jack-rabbits for the others' suppers. Some of the gentlemen had revolvers, and when the snow got crusty over so's they could walk on it, they used to shoot 'em. And we were glad enough of every one shot, provisions were so scanty. The last two days them rabbits and snow water melted in a pal over the stove as we had to eat or drink."

"I suppose there was nothing for you to do but to wait," said Miss Vaughn.

"No, ma'am; there wasn't nothing at all for me to do but help the young lady now and then. She let me help her more than the rest, I used to think. She'd come to me and say, 'Mr. Scott, this rabbit is for you and the conductor.' She never forgot anybody—except herself. Once she asked me to hold the sick little girl while she took a sleep. It was mighty pretty always to see her with them children. They never seemed to have enough of her. All of them wanted she should put them to bed, and sing to them, and tell them stories. Sometimes she'd have all five swarming over her at once. I used to watch them."

"Well, how did it end?" asked Miss Vaughn, as the engineer's voice, which had gradually grown lower and more dreamy, came to a stop.

"Eh? What? Oh!"—rousing himself. "It ended when three locomotives and a relief train from Cheyenne broke through to us on the eighth morning after we was blocked. They brought provisions and coal, and we got on first-rate after that. Did the sick lady die, no, ma'am. She was living, when I last heard of her, down at Santa Barbara. Two years ago that was."

"And what became of your young lady?"

"She left at Sacramento. Her brother or some one was down to meet her. I saw him a moment. He didn't look like her."

"And you never saw her again? You never heard her name?"

"No, ma'am, I never did."

The engineer's voice sounded gruff and husky as he said this. He shovelled in coal with needless energy.

"Are you a married man?" asked Miss Vaughn. The question sounded abrupt even to herself, but seemed relevant to something in her mind.

"No."

John Scott looked her squarely in the face as he replied. His countenance was rather grim and set, and for a moment she feared that she had offended him. Then, as he met her deprecating gaze, he reassured her with a swift smile.

"No, ma'am, I ain't; and I never shall be as I know of," he added. "Second-rate wouldn't satisfy me now, I guess."

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## RECONSTRUCTION.

Two girls sat on a broad veranda of a Southern hotel, while a fine, soldierly-looking man passed slowly by.

"Look, Estelle!" exclaimed the younger of the two girls, "I dare say there is a true Southerner who fought for the 'Lost Cause.'"

"Yes," said Estelle, "and there is your brother Tom, and he is bringing the stranger here."

Both the girls fluttered a little, then settled into feigned unconsciousness of any approach, until they were roused by Tom Vaughn's introduction of his friend, Colonel Dalton. Tom informed them the Colonel and he came upon each other at the American Legation in Paris and had "done the Continent" in partnership. They were fast friends, therefore, and delighted to meet, especially in this out-of-the-way watering place, where the Vaughn family were stopping for the sake of Tom's health—"lost in the infernal swamps of Alabama during the war."

In less time than I have taken to write it all four were chatting socially.

"Ah, the South is not what it was!" ventured Camille, at the first opportunity.

"What with the war and its consequences, we are a sorry sight indeed."

"Camille here is a regular fanatic," explained Tom. "For my word, I don't believe she knows the war is over, but means to fight it out to the bitter end."

"Yes," cried Camille, rising to the full glory of four feet eleven, in a cloud of white organdie; "and if the men of the south had had the spirit of their sisters they would have been fighting yet. But a truce to this! Colonel Dalton, may I show you our birds?"

And the two were gone, leaving Tom on the veranda to make indolent love to his fair cousin Estelle.

As time passed the gallant Colonel, always a pleasant companion, was thenceforth welcome in the Vaughns' exclusive circle. Camille fell to the Colonel's care in their walks and drives and they came to be on excellent terms with each other.

During the war there had been an engagement near the old town and many Confederate soldiers had been buried there in a cypress grove, which tender hands had since cared for. Colonel Dalton and Miss Vaughn had been walking in this grove and sat down to rest on a rude seat. The melancholy notes of the mocking-bird came up from the fragrant woods, and Camille, quite tired and saddened by the place and its associations, spoke softly:

"I would rather be buried with those fellows than live to know my country defeated and her poor-spirited sons forgetting their allegiance."

Colonel Dalton took her hand gently and told her that this was the fortune of war. The South had fought bravely, but had been outnumbered. That when partisan spirit should be lost, in the march of time and progress, impartial history and the hearts of the people would do justice to the brave upholders of the "Lost Cause."

Camille's tears had gradually ceased as she listened, and the little hand lay passively in his.

"Colonel, you never told me what division you were with, nor where you fought."

There was a pause; then he spoke, slowly and firmly:

"I was a Union officer in the Army of the Potomac. I fought in the Wilderness, at Gettysburg, at Pittsburg Landing, Antietam. I starved for nine months in Libby Prison, and was almost cut to pieces at Vicksburg."

"Great heavens!" cried Camille; "you were a Yankee soldier?"

"I was," said the Colonel calmly, "and loyal in thought and act to the Federal cause."

There was a long silence, and then she timidly asked, "Were you in Kentucky?"

"No; never in Kentucky during the war."

"Well, I am glad of that," and she drew a long breath; "then we can still be friends. But I must always hate every Yankee that desecrated the soil of my native State. You have been very gentlemanly and very kind," she faltered, "but of course we can never be quite the same again—though I thank heaven you never fought in dear Kentucky."

Colonel Dalton bowed. "Whatever your pleasure shall be my duty," he answered stiffly.

Camille shivered and said she ought to be in out of the evening dew. So the Colonel gave her his arm and they walked silently home. As he turned to leave her in the hall she stopped him.

"Of course it is so different now, because you are a Yankee. Still you—"

How stupid he was not to notice the poor child's confusion, not to notice her quivering lips and her timid hesitation, in such marked contrast with her usual manner!

But he only bowed and said:

"Your friendship is very dear to me, Miss Vaughn; but, trust me, I will respect your peculiar aversion."

"He might have apologized for being a nasty Yankee," sobbed Camille, in her own room, a little later. "Even when I hinted that I might be able to overlook it because he had not helped to desecrate dear old Kentucky, he didn't seem to care whether I did or not."

After this there was a coldness between the two. He scrupulously regarded her prejudices against the Northerners, and she was too proud to show that she related. She smarted a little too, under the knowledge that she had humiliated herself a little that night in her half-apology for him, and she could not quite forgive him for not understanding her and meeting her cordially advances half way. Just at this time Dr. D'Aumale, an admirer of Camille's from New Orleans, came upon the scene and appropriated her attention. A fine period seemed to have been put to the intimacy between Miss Vaughn and Colonel Dalton.

It was a time when the South was overrun by banditti. Thieves and ruffians from the lowest strata of both armies found their desideratum at the heels of the war and lacked no opportunity for crime.

The Vaughn estate was distant a day's drive from the Springs, and one morning in the late summer the carriage was drawn up at the hotel and the family bade farewell to their friends.

Mrs. Vaughn and Tom had insisted that Colonel Dalton should accompany them home and pay them a visit, but he had

politely begged off, promising himself the pleasure at another time.

He glanced uneasily at the cortege. Tom and D'Aumale were mounted as outriders, but Tom was almost an invalid. The coachman was a stupid yellow boy, and altogether the party seemed alarmingly defenseless to Colonel Dalton. He spoke earnestly to Tom about the danger from marauding bands, and the necessity of keeping a close watch on so wild and dangerous a road.

"What are you two looking so solemn about?" called Camille from the carriage.

"Colonel Dalton has just warned me of a danger that had not occurred to me," answered her brother. "The country is full of poor devils let loose from the army, and this might be a rather tempting affair to them," and he glanced dubiously at the carriage.

"Pshaw!" cried Camille, "they would never molest a true Southern family. Besides, we are strong enough in any case."

"Certainly," Miss Camille, "snipped D'Aumale. "I will defend you with my life. Our Northern friend is too apprehensive."

So with gay good-bys they swept off, and were soon out of sight.

Colonel Dalton took a stroll, then threw away an hour at billiards, and then precipitately ordered his horse, strapped on two six-shooters and galloped off across the country with his mind full of Camille. He said to himself that he would follow and see that no ill befell her. She would probably never know it, and it could do no harm. He rode till the sun dipped low behind the Western hills, and then he bent his head and listened a moment. His hearing was as acute as an Indian's. He dashed the spurs into his horse's flanks. The sensitive creature bounded forward with a snort, almost flew around the over-hanging bluffs, plunged madly through the creek and up the opposite bank.

There the Vaughn carriage lay overturned, poor Tom stretched senseless on the ground, five murderous-looking villains were gathering up the valuables of the party and rifling the trunks, which they had broken, while Camille was screaming and struggling in the grasp of one of the ruffians.

Unobserved amid the general melee and in the gathering twilight, Dalton was dismounted and among them in a moment. To knock down Camille's assailant with the butt of a revolver was the work of an instant; then, taking deliberate aim, he fired at the apparent leader of the gang, who fell with a loud curse. The rest thinking that an armed hand had fallen upon them, sprang to their horses. Dalton dropped another of the miscreants as they darted off pell-mell into the woods, firing back a harmless volley into the air.

The man whom he had stunned with the blow from his revolver was now reviving:

"Here, Sam," shouted Dalton, to the coachman, who had been roaring and kicking on the grass, "bring a rope and help me to bind this fellow."

Having discovered that the others were too badly disabled to escape Dalton turned his attention to the sufferers. Mrs. Vaughn was just recovering from a faint in Estelle's arms. Camille had gone to the assistance of Tom, who was now rising, dazed and confused from a blow on the head. D'Aumale, who had been helpless during the whole encounter, was recovering his courage as best he could.

"By heavens, old fellow," cried Tom; "what good angel ever sent you here? We owe you everything."

Mrs. Vaughn and Estelle blessed their preserver with hysterical tears, but Camille went to him timidly and gave him her hand. "Thank God for the courage of a Yankee soldier," she said. And Charley Dalton's cheek flushed as he pressed the little hand and whispered:

"It was nothing; it was for you."

It was only a few miles from home. The carriage was righted, and they were soon safe in the rambling old mansion.

The prisoners were handed over to justice, and their subsequent revelations were the means of breaking up a formidable band of desperadoes.

"Southern chivalry is at a discount," laughed Camille as they were in the library on that eventful night, "though poor Tom was doing his best till he got that unlucky thump."

D'Aumale blushed, and looked as if he wished he had been the recipient of the thump instead of Tom.

But Camille turned to Dalton and said gravely:

"Colonel, before these witnesses I want to ask your pardon for saying that Yankees are all cowards. I am only a poor, foolish girl, but I want to be just."

The tears stood in her beautiful eyes.

"We will give a truce to war," said Charley Dalton, smiling; but I would like a hostage from the enemy."

Camille met his eyes, brimming with tender devotion, and with a bright blush she put both her hands in his.

How Mexicans Punish the Wickedest Man on Good Friday.

Once a year, on Good Friday, the Mexicans select a victim for whipping, and sometimes more than one, writes a correspondent from Mexico City. The selection is made by taking the worst one in the lot. This is determined by making a confession before a priest of the year's misdeeds, and the one decided to be the worst sinner is selected as a sort of "scape-goat" to bear the torture.

The martyr is prepared at the church by being stripped nearly naked and by being prayed for. Then he is made to carry a heavy cross full ten feet high, with the cross of five or six feet in length, and made of wood six to eight inches in diameter. He carries this cross for a considerable distance to a place selected for the purpose, where there is another larger cross erected.

Arriving at the upright cross, he carries his cross around it and is then permitted to lay it down. Here the business takes a turn not quite so agreeable to the candidate, for he finds a crowd of worshippers surrounding him. Two of these worshippers are armed with large cactus bushes of what is commonly called "tree cactus" or "cane cactus," on account of its being used to make walking-canes of. This cactus grows to the height of three or four feet, and is armed with thousands of needle-like spines fully an inch long. The main stalk is as large as a man's wrist at the ground, branching off as it rises, and each branch having many

lateral branches from three to five inches in length, all fully armed with needle-like th



THE FOND PAPA'S LULLABY.

I-Allegretto Scherzando.  
Come baby dear,  
The night is here,  
"Tis time thou wert in slumber.  
To close thine eyes,  
Sweet lullabies  
I'll sing thee without number.  
Sleep, baby sleep,  
Close watch I keep;  
Fear not, thy father's near thee.  
Safe in his care,  
Whisper thy prayer,  
The angels bend to hear thee.  
Rest, sweet one, rest,  
On papa's breast,  
No one will dare to harm thee.  
Hush while he sings  
All sorts of things  
Into sweet sleep to charm thee.  
An hour is supposed to elapse.  
II-Allegretto, Con Furo.  
Shut up, I say!  
Come, I can't stay  
Up here all night and bother!  
Don't yell like that—  
Confound the brats—  
Here, take them to his mother!  
(Somerville Journal.)

A Soldier in Petticoats.

"It was a cold day toward the end of the autumn of 1879," said a Russian officer, "that I, Alexis Pletneff, sub-lieutenant of the regiment of the Chevaliers Gardes de l'Imperatrice, placed myself in the hands of the well-known St. Petersburg coiffeur, Deleuri, and dolefully ordered him to shave off my mustache, the cherished object of so much care and attention. Alas, there was no help for it. I had been unfortunate enough to lose a wager to my pretty but mischievous little cousin, Vera O—, who had taken the very mean advantage thereof to extort from me a promise to have my photograph taken in female costume."

"In the space of two minutes my mustache, which had taken so many long, weary years to grow, was gone, and Deleuri was arranging my hair into a most elaborate coiffure, which he finally finished off by pinning on my head an enormous Rubens hat, trimmed with a great yellow bird with its beak wide open. I had on a most elaborate black silk carriage dress, with a velvet mantle, and had it been for my tall stature and ungainly movements I could have passed off as a by no means ill-looking young lady. Deleuri and my servant then helped me down stairs and across the pavement to my carriage, in which I was driven rapidly off to the court photographer, Levitsky, sitting as far back in the vehicle as possible so as not to be seen."

"In far too short a time I had arrived at my destination, the chasseur handed me out of the carriage and, my deep blushes hidden by the veil, I began slowly to ascend the staircase leading to the photographic atelier on the second floor. Suddenly, when about one quarter of the way up, I heard a door open on the first floor landing, and, looking up, to my horror beheld the czar coming down stairs buttoning his long military cloak over his uniform. Being only nineteen years of age at the time, I did what many older men would have done in my place, that is to say, I completely lost my presence of mind. Instead of merely remaining where I was and courtesying as it passed, I drew myself up erect as if on parade, with my right hand brought to the side of my hat in true military salute."

"The Emperor, considerably surprised at this behavior on the part of such a well-dressed young lady, came down the stairs, stopped short in front of me, stared at me for about half a minute from head to foot and finally exclaimed: "What does this mean? Who are you?" "Alexis Pletneff, sub-lieutenant of the Chevaliers Gardes de l'Imperatrice, sir," I replied, in fear and trembling.

"And what may be the meaning of this masquerade?" he inquired, severely.

"May it please your majesty, I have lost a wager to my cousin, Vera O—, and have been called upon to pay forfeit by having myself photographed in lady's dress."

"Before I had finished, the frown on the czar's face had given way to that ever-memorable and winning smile which those who have seen can never forget."

"Well, go and have yourself photographed in accordance with your promise, and afterward go to the general commanding your regiment dressed as you are, and tell him that I ordered you to report yourself to him." With that he went down stairs, leaving me convinced that my military career was ruined forever.

"I hardly know how I got through the sitting for my portrait, which, however, Levitsky pronounced very successful; but, however I rang the bell at the door of Gen. Baron H—'s house. The orderly who answered the door inquired politely: "What name shall I announce, miss?" and was greatly staggered when I angrily exclaimed: "Why, you fool, don't you know me? Announce Lieut. Alexis Pletneff." The man stared at me a minute, and then stuffing his handkerchief into his ugly mouth to prevent his screaming with laughter, went into the general's library and announced me.

"I heard the general reply, 'Tell Mr. Pletneff to come right along in.' As I entered the room the general, without looking up, bade me take a seat until he had finished a letter he was writing. I sat for about five minutes. At length he threw down the pen and raised his eyes. Starting up, he exclaimed: "I beg ten thousand pardons, madame, for keeping you waiting, but I understood one of my servants to say that one of my officers was here to see me. There was no help for it, so, standing up again erect as on the stair-case at the photographer's, an hour previously, I brought my right hand up to the side of my hat in military salute, and said: "Excellency, I am sub-lieutenant of your regiment. For the sake of a wager I had to go and get photographed in this costume and on my way I met his Majesty, who ordered me to come and report myself to you dressed as I was." "O,"

strange woman, as she thought, was seized with a violent fit of jealousy.

"Catching hold of me in no gentle manner and apostrophizing me as a 'shameless minx,' and with other equally polite epithets, she attempted to pull me away."

"Why, I am not a she, baroness! I am a he," exclaimed I, almost crying with vexation.

"At these words the baroness stared at me for a minute, recognized me and then, notwithstanding the gravity of the situation, laughed. The general recovered after a few minutes, and, having ordered me to remain under arrest in his dining-room until his return, he buckled on his sword and went off to the winter palace."

"Meanwhile, thanks to the indiscretion of the orderly, the story of my adventures had spread like wildfire through the barracks, and within a quarter of an hour everyone of my brother officers were in the dining-room convulsed with laughter, in which, though in despair as to the future, I could not help joining. At last, after about two hours, during which I had been made to wait or polka with each of them in turn, the general returned and informed me, in his usual kind manner, that the Emperor had taken the matter most good-naturedly."

"His Majesty had ordered that I was to remain under arrest for two days for appearing in public without my sword, and that as soon as the photograph was ready I was to go to the palace and present a copy to the Emperor in person. When a few days later I reported myself to his Majesty he chaffed me in the kindest manner about my appearance in petticoats, and was pleased to express his high approval of the portrait, which he made a point of keeping."

A Nation of Contradictions.

Some Eastern nations are made up of contradictions. The Bengalee frankly says, "I am timid," and dies with a calmness that a brave man might envy. The Chinese have little physical courage, but they will commit suicide if an enemy may be thereby injured. At Hankow, a Chinese barber prosecuted one of his men for stealing two dollars. The man committed suicide, not for shame, because there is no discredit in China, but to spite his master."

As soon as he was dead, his widow went before a mandarin and proved to him that her husband's death had been caused by his master's prosecution. The mandarin then ordered the barber to pay one hundred and twenty dollars for the support of the widow.

The house-bots throng with children, and, with all the care in the world, they do fall into the river. To guard against that contingency, a record is tied around the waist of each male child, to which is attached a float. But no female child is provided with a float; they may drown and welcome.

Boys are prized. The punishment for stealing a male child is death. But girls are considered an expensive nuisance, and frequently die from lack of care. Their bodies are tossed into the nearest hole. A large ditch outside of Foo-chow was so much used for the purpose that the authorities posted the notice: "Female infants may not be thrown here."

The people seem to be indifferent to human suffering, however piteous. "One day in Foo-chow," writes an English officer, "the struggles of a drowning man absorbed the interest of a crowd, who made not the slightest effort to rescue him."

"A bystander, unable to obtain a clear view, expressed a doubt whether the man had really perished, whereupon the irritated mob immediately tossed the skeptic into the river with the remark, 'Go and look after him yourself.' He, too, perished."

The author of "English Life in China" writes that it is a country "where roses have no fragrance, the women no petticoats and the magistrates no honor; where old men fly kites and puzzled people scratch their backs instead of their heads; where the seat of honor is on the left and the abode of intellect in the stomach; where to take off your hat is insolent and to wear white is to wear mourning; where, finally, there is a literature without an alphabet and a language without a grammar."

Mexican Widows.

When a Mexican lady is widowed, a family council is immediately called, her male relatives and those of her husband charging themselves with the education of her sons and the care of herself and daughters quite as a matter of course. Though the widow and her grown-up daughters may be accomplished as well as poor, nobody dreams of the possibility of their doing anything towards supporting themselves, and the proffered aid is calmly accepted as a hereditary right. Even if the widowed mother is healthy she can by no means be independent. Custom, which here rules with iron hand, prescribes that the entire superintendence of her property and the education of her children shall be delegated to her male kindred, and unless she is really an aged woman, she must reside with her relatives. So thoroughly are Mexican gentlemen imbued with this idea of womanly dependence that they do not regard the care of any number of bereaved families as an unjust burden, but, on the contrary, when a man marries he virtually contracts to befriend all the female kindred of his lady love, and to provide for them, if need be. This sort of knightly courtesy makes matrimony a serious matter, and perhaps accounts for the number of eligible bachelors with which Mexico abounds; but, badinage apart, it is a beautiful custom, and a strong proof of the innate chivalry of Mexican gentlemen is found in the fact that the estates of widows and orphans are invariably administered with scrupulous honesty."

The Results of a Century of Republican Government.

Mr. Andrew Carnegie, the iron manufacturer, in his book on America, thus sums up the results of a hundred years of Democratic government:

1. The majority of the English-speaking race under one republican flag at peace.

2. The nation which is pledged by act of both parties to offer amicable arbitration for the settlement of international disputes.

3. The nation which contains the smallest proportion of illiterate, the largest proportion of those who read and write.

4. The nation which spends least on war, and most upon education; which has the smallest army and navy in proportion to its

population and wealth of any maritime power in the world.

5. The nation which provides most generously for their lives for every soldier and sailor injured in its cause, and for their widows and orphans.

6. The nation in which the rights of the minority and property are most secure.

7. The nation whose flag, wherever it floats over sea and land, is the symbol and guarantor of the equality of the citizen.

8. The nation in whose Constitution no man suggests improvement; whose laws as they stand are satisfactory to all citizens.

9. The nation which has the ideal Second Chamber, the most august assembly in the world—the American Senate.

10. The nation whose Supreme Court is the envy of the ex-Prime Ministers of the parent land.

11. The nation whose Constitution is "the most perfect piece of work ever struck off at one time by the mind and purpose of man," according to the present Prime Minister of the parent land.

12. The nation most profoundly conservative of what is good, yet based upon the political equality of the citizen.

13. The wealthiest nation of the world.

14. The nation first in public credit, and in payment of debt.

15. The greatest agricultural nation in the world.

16. The greatest manufacturing nation in the world.

17. The greatest mining nation in the world.

Obscurity of Language.

Obscurities of language are found in many great writers, even in Shakespeare or Milton, but they are blemishes and not evidences of genius, as some blind worshippers of these authors would have us believe. And the clearer a writer's style is the surer he is of an enduring fame. Dr. Johnson's verbosity was a standing joke among many of his contemporaries. Of him Macaulay said that he wrote in a style in which no one ever made love, quarreled, drove bargains or even thought. When he wrote to his friends he wrote good English, but when he wrote for publication he "did his sentences into Johnsonese." It has been said: "He has had his reward. His 'Rambler' lies unread on our book-shelves; his talk, as recorded by Boswell, will be perused by thousands of delighted students."

Carlyle's extraordinary style undoubtedly militates against his being more extensively read, and Robert Browning is unappreciated by many readers because, though he is one of the first of modern poets, his meaning is often obscure. Referring to this obscurity, a capital story is told of Douglas Jerrold, who, while recovering from a severe illness, undertook to read Browning's "Sordello."

Line after line, page after page, he read, but no consecutive idea could he get from the mystic production. Mrs. Jerrold was out, and he had no one to whom to appeal. The thought struck him that he had lost his reason during his illness, and that he was so imbecile that he did not know it.

A perspiration burst from his brow, and he sat silent and thoughtful. As soon as his wife returned he thrust the mysterious volume into her hands, crying out:

"Read this, my dear."

After several attempts to make any sense out of the first page or so, she gave back the book, saying:

"Both the gibberish! I don't understand a word of it."

"Thank Heaven!" cried Jerrold. "Then I am not an idiot!"

An Old Puzzle Rewritten.

"If you please sir I'm a poor boy, but I'm awfully smart and I want to work."

The storekeeper looked at his customer in astonishment. The boy was a little bit of a fellow, and his chin came just over the top of the counter.

"Well," said the storekeeper, "you seem to have a pretty good idea of yourself."

"That's so," said the boy, "I lost my last place 'cause I was smart."

"All right, then; I'll show you where you make a great mistake when you say you're smart. Do you see that jug over there?" asked the storekeeper.

"No, sir," said the boy, looking hard at a green box marked "Safety pins."

"Not there; way back in the store."

"Oh, yes," said the boy.

"Now, that jug is full of vinegar; it hold's eight quarts. I've an order for four quarts, but haven't any empty measures excepting one holding three and another five quarts. Now, if you are as smart as you say you are, perhaps you can measure the four quarts from the eight by using the three and five."

"I can do it," said the boy, just as easy as fishing."

"If you do, I'll give you two dollars a week and your clothes. No guessing, now; you must measure exactly."

"All right," said the boy; "have your tailor here in fifteen minutes to measure me please."

The boy had the four quarts of vinegar measured out in less than five minutes.

How did he do it?

ANovel Use for Newspapers.

Sallie Joy White, in the "Germanian Telegraph," tells how to clean a mirror or window glass with newspaper, which she says is excellent for the purpose:

"Take a newspaper or part of one, according to the size of the glass. Fold it small and dip it into a basin of clean cold water. When thoroughly wet, squeeze it out in your hand, as you would a sponge, and then rub it hard all over the face of the glass, taking care, if it is a mirror, that it is not so wet that the moisture will stream down the glass, also that no drops get beneath the frame and behind the glass, as they will remain there in bubbles and cannot be dislodged without removing the board at the back. But there is no danger of such accidents if the newspaper is merely moistened or dampened throughout. After the glass has been rubbed well with the damp paper, leave for a minute or two; then take a fresh paper folded small in your hand and rub the glass thoroughly with it until it looks clear and bright, which will be surprisingly soon, almost immediately in fact. Finish with a fresh piece of newspaper, thoroughly dry. This method, simple as it is, will be found on trial the best and most expeditious way of cleaning mirrors or any plate glass, giving a clearness and polish which cannot be so soon produced by any other process."

VARIETIES.

A VERDANT housewife, fresh from her rural home, came to the city to purchase various household necessities. She glanced timidly about her, and was evidently confused by the countless shops which took the place of the village accommodation store. There was a bucket-shop near by, with the usual sign over the door: "Stooks, Grains and Oil." She read the words and entered the place.

"I want to buy some oil," she said.

The proprietor gave her a one-cent-percentage smile, and winked at the telegraph operator to get some Oil City quotations.

"I want to buy a great deal."

The bucket-shop man wondered if his safe would hold all the margin money.

"I can buy 50,000 barrels for you, madam," he said.

"Or ten thousand barrels—"

"I don't want as much as that."

"Or even a thousand barrels. The charges for carrying it will be—"

"Oh," she exclaimed. "You see, I don't live very far from here, and the train stops just beyond our farm; so, if you'll put me up a gallon, I'll carry it home myself."

She was shown the corner grocery without unnecessary courtesy or deliberation.

"MAMIE," said a grammar-school girl to a member of the graduating class, "have you finished your essay?"

"O, yes," rushed Mamie; "and it is too lovely for anything—a princess slip of white sash, the back cut off a little below the waist line, and full breathes of silk gathered in so as to hang gracefully over the tunic, and three bias ruffles on the—"

"Why, what are you talking about?" interrupted her friend. "I mean, have you finished writing your essay, you know?"

"Er—no," said Mamie, her enthusiasm rapidly diminishing; "but I have begun it, and I wish the awful thing was in Halifax!"

"What the subject?"

"Gracious! Isn't that a difficult subject to write up?"

"Difficult! Well, I should giggle! I'll have to hump myself to get it finished in time for the commencement, and I have a good notion to let it slide. I might just as well let the Professor's optic pleading illness, but I am not that sort of a hairpin. But come, wait up until my room and look at my stunning graduating harness. It'll paralyze you."

UNINFORMED.—A good story is told of a French advocate who had made it a rule never to take up a case which he did not thoroughly believe. One day he chanced to be entertaining a distinguished company at dinner, when he was informed that a client urgently requested a few minutes' interview. It turned out to be a man whose acquaintance on the charge of stealing a watch he had on that morning procured. Appearances had been strongly against the prisoner, who it was thought, had been not a little assisted by the character of his counsel. Doubtless the poor fellow was impatient to express his gratitude, and an audience was not unwillingly accorded. He looked somewhat abashed at the presence of the guests; but reassured by the kindly tone of the host, began: "Monsieur, it is about that watch."

"Yes, my friend, I congratulate you on the triumphant vindication of your innocence." "Then the trial is quite over?" "Why, of course!" "And can't be tried again?" "Certainly not!" "They can do nothing more with me?" "How could they?" "Then, I may wear the watch!"

THE EDITORIAL EXCURSION.—Once upon a time a real editor, by some strange chance, found himself along with one of those editorial excursions that you frequently read about. There were a couple of hundred in the party, but he was the only editor among them, and he felt very lonesome. Not only that, but he was looked upon with suspicion and mistrust by the other fellows, who wondered what business he had there anyhow.

One veteran traveler on a dead-end pass that he wasn't entitled to said he had been on scores of editorial excursions, and that was the first time that an editor, that is to say a real bona fide editor, had ever shown up. If this thing was encouraged he felt that the editorial excursion was doomed. Its epitaph might as well be written.

So with one accord they all sat down on the solitary editor and made it so uncomfortable that he got out of the train at the first stopping place and returned home.—Texas Sittings.

FLORENCE'S STORY.—"Billy," Florence told how he once took a girl he was soft on to the theatre and afterward to an oyster supper. When he came to settle he found he had left his money at home. The waiter refused to take his word for it, the girl began to cry, and the proprietor came up, to whom Florence offered his watch as security. A venerable-looking man interfered, saying he had observed the whole proceeding; that the young pair were entirely innocent and truthful, and voluntarily tendered a twenty dollar note in payment of the claim. He got the change and walked out. The actor followed him to the sidewalk, and, thanking him for his kindness, requested him for his name and address that he might return the money. The venerable-looking man replied: "You don't owe me anything, young man. That bill was a counterfeiter, and that duffer gave me good money in change. He is not the first sucker I've caught by the benevolent dodge. Good evening."

A NEW MATERIAL FOR BONNETS.—"Miranda, my love (hio), there's a new material been found (hio) for bonnets."

"What is it, pray?"

"Leathery fungoid. You (hio) soak it in water and it takes any (hio) shape. A great saving, don't you see?"

"Yes, I've a suspicion your head is made out of it. Go soak it in water. It may not alter the shape, but will be likely to sober you up a little. Hold it under the hydrant for an hour and a half, dear."—Phila. Call.

"My dear children," said Deacon Buehrig in his address to the Sunday-school, "since my last visit I notice many new faces among you, and it fills my heart with joy. Can you tell me, dear children, what it is that has caused this growing attendance? What is it that brings these bright young men in Austin before I found that the only way to a galoot was to come the inmate modesty and total indifference racket on him."

THEY had just been married. He seized her hand and said in a low, tremulous voice: "It was your innate modesty and apparent indifference, dearest Sallie, that made me register a vow to marry you at all hazards."

"Yes," she sighed, "but I slipped up on three or four of the most eligible young men in Austin before I found that the only way to a galoot was to come the inmate modesty and total indifference racket on him."

A NARROW ESCAPE.—Are we all here? Inquired Mr. Brutal Jones of his landlady the other morning at the breakfast table.

"I think so; one, two, three, four; yes, you

are all here, I believe," and she smiled sweetly: "why?"

"Nothing much, only I see by the morning paper that a human skeleton was picked up just outside the city limits."

The smile vanished.

Chaff.

"Back numbers" is what the girls call bachelor heaven over 40.

Be what you seem to be, unless you are an actor taking the part of a crank.

Strawberry boxes probably need no cover because the bottom is so near the top.

When doctors give a man up his chance for life has gone. When lawyers give one up his money is gone.

Polite but absent-minded bathers (to friend up to his neck in water): "Ah, Jones, very glad to see you. Won't you sit down?"

A grindstone, says an agricultural contemporary, is one of the worst used implements on the farm. The other is the boy who has to turn the blasted thing.

A mathematical calculation has shown that if the muzzles of a steam train in this country as strong as those of a flea, he could throw a book agent two miles.

Marryin' a man ain't like settin' alongside of him nights and hearin' him talk pretty; that's the first prayer. There's lots o' lots o' mornin' after that—Rose Terry Cooke.

An old railroad conductor was heard to remark yesterday that the passenger travel was so very light he found it impossible to make a payment on a new house he was building. This is strange.

Visiting clergyman (in Indian nation): "Are all these Indians Christians?" Irish waiter: "No, sir; not wian of them; some Comanches an' some Hopewellians."

YOUTHFUL POET.—"I dashed that poem off on first effort. Don't you think it remarkable?" Prosodic Poet:—"Under a heavy pressure of inspiration, eh?" "Yes, I didn't even read it over." "Nor is it likely anybody else will."

An English boulevardier—Miss Montmorency: "No, sir; there are no clothes in those trousers of yours, but I have begun it, and I wish the awful thing was in Halifax!"

"What the subject?"

"Gracious! Isn't that a difficult subject to write up?"

"Difficult! Well, I should giggle! I'll have to hump myself to get it finished in time for the commencement, and I have a good notion to let it slide. I might just as well let the Professor's optic pleading illness, but I am not that sort of a hairpin. But come, wait up until my room and look at my stunning graduating harness. It'll paralyze you."

Another reform called for. Nellie (who has just been hustled out of her chair by her obstreperous brother): "Do you see, mamma? Herman is such a naughty boy! I do wish, dear mamma, you would be more careful in the selection of your children!"

Uncle Rastus (to lawyer): "I heah, sah, dat indelity an' sunshunt grounds fo' divo'ce. Lawyer—Yes, if you can prove it. Uncle Rastus: "I can prove it. I have been at wunce. Dat ole 'oman o' mine haint been ter church in foah months, sah."

Dog-fancier.—Well, mum, have you come to buy another pup? Miss Plantagenet—No, sir, not exactly. Mamma wished to know if you could exchange this pup for a black-and-white one. He is just as good as new and we are going into half-mourning next week.

Jeff Davis declares there is no such thing as the "lost cause"; that it is not lost. Of course it isn't. Under a heavy pressure of inspiration, eh?" "Yes, I didn't even read it over." "Nor is it likely anybody else will."

"Can you mount by means of the pedal?" was asked of an amateur recently. "No," was the reply. "I mount from behind."

"How do you get off the machine?" "Usually in five minutes, but I have been known to leave the machine, but getting off the front is the most direct way."

An old gentleman at the opera was greatly annoyed by the constant coughing of a lady seated next to him. He bore up under the annoyance for a long time, but finally turned to her and said: "That is a very bad cough of yours, madam. But it is the very best I've got," replied the lady, sweetly.

A divorce case soon to come up in a Maine court is the result of a trifling quarrel between a man and his wife 25 years ago. At the time, although living together, neither has any children, and the wife is now a widow when in the excitement of housecleaning the woman said to the man: "Where's the nail?" The man looked at the woman calmly and did not answer.

Fair Customer.—I want to get a box of candy for a gentleman. What kind would you recommend? Confectioner.—What is his business? Fair Customer.—He is a paragrapher on a newspaper. Confectioner.—Some of the best would be appropriate—candied chestnuts, you know. Fair Customer.—Give me a column of them.

In hundreds of cases Hood's Sarsaparilla, by purifying and enriching the blood, has proven a potent remedy for rheumatism. Hence, if you suffer the pains and aches of this disease, it is fair to assume that Hood's Sarsaparilla will cure you. Give it a trial.

NEW ADVERTISEMENTS.

Rheumatism

It is an established fact that Hood's Sarsaparilla has proven an invaluable remedy in many severe cases of rheumatism, effecting remarkable cures by its powerful action in correcting the acidity of the blood, which is the cause of the disease, and purifying and enriching the vital fluid.

It is certainly fair to assume that what Hood's Sarsaparilla has done for others it will do for you. Therefore, if you suffer the pains and aches of rheumatism, give this potent remedy a fair trial.

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"I was troubled very much with rheumatism in my hips, ankles, and wrists. I could hardly walk, and was confined to my bed a good deal of the time. Being recommended to try Hood's Sarsaparilla, I took four bottles and am perfectly well. I cheerfully recommend Hood's Sarsaparilla as one of the best blood purifiers in the world." W. F. Wood, Bloomington, Ill.

For Twenty Years.

I have been afflicted with rheumatism. Before 1883 I found no relief, but grew worse. I then began taking Hood's Sarsaparilla, and it did me more good than all the other medicine I ever had." H. T. RALPH, Shirley, Mass.

"I suffered from what the doctors called muscular rheumatism. I took Hood's Sarsaparilla and am entirely cured." J. V. A. FROST, letter carrier, Chicago, Ill.

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BULL'S SARSAPARILLA.

Secures the life and acts like a filter to cleanse impurities from the blood. It is regularity in its action or suspensions of its functions, the bile poisons the blood, causing jaundice, sallow complexion, weak eyes, bilious diarrhoea, a languid, weary feeling, and many other distressing symptoms generally termed liver troubles. These are relieved and cured by the use of BULL'S SARSAPARILLA the great blood purifier.

DR. JOHN BULL.—I have been a number of years severely afflicted with a mercurial headache and a dull, heavy feeling in the head. Three bottles of BULL'S SARSAPARILLA gave me more relief than all the other remedies.

T. H. OWENS, Louisville, Ky.

DR. JOHN BULL.—I have examined the prescription for Rheumatism of DR. JOHN BULL'S SARSAPARILLA, and have found it to be an excellent one, and well calculated to produce an alternative impression on the system. I have used it both in public and private practice, and think the best result has been obtained in all cases.

M. F. LYLES, M. D., Louisville, Ky.

Res. Fayette at Louisville, Ky.



